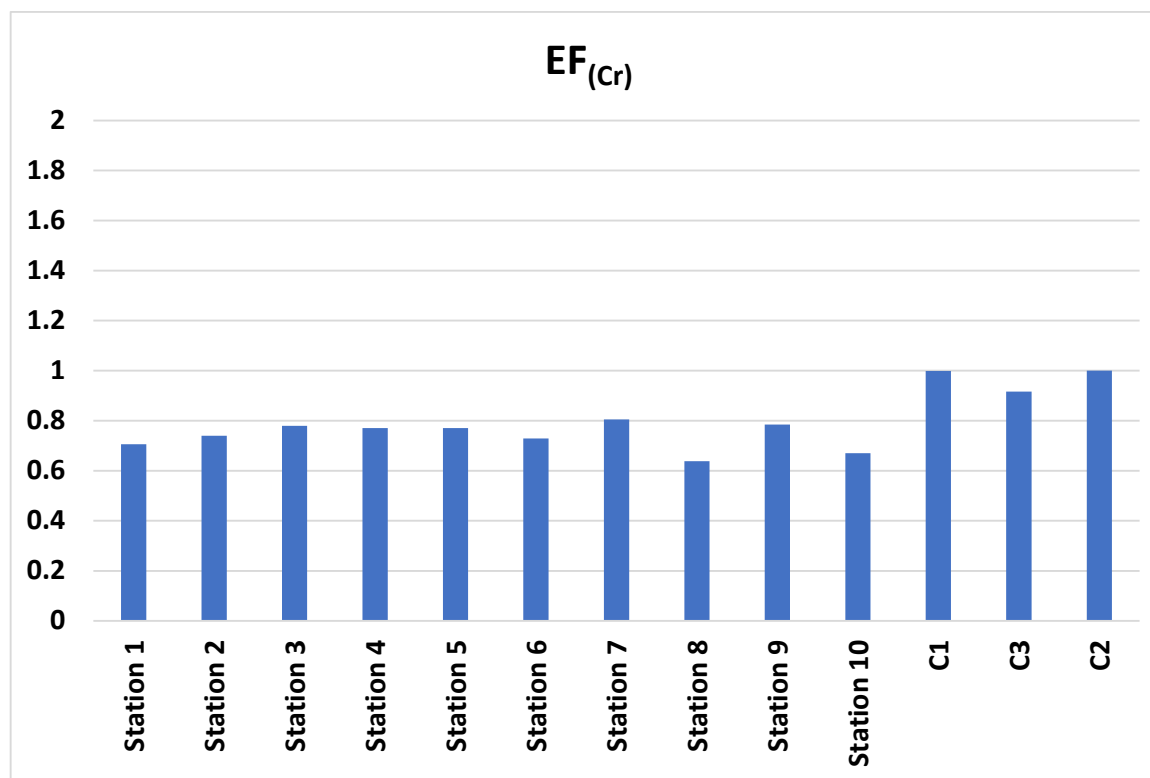
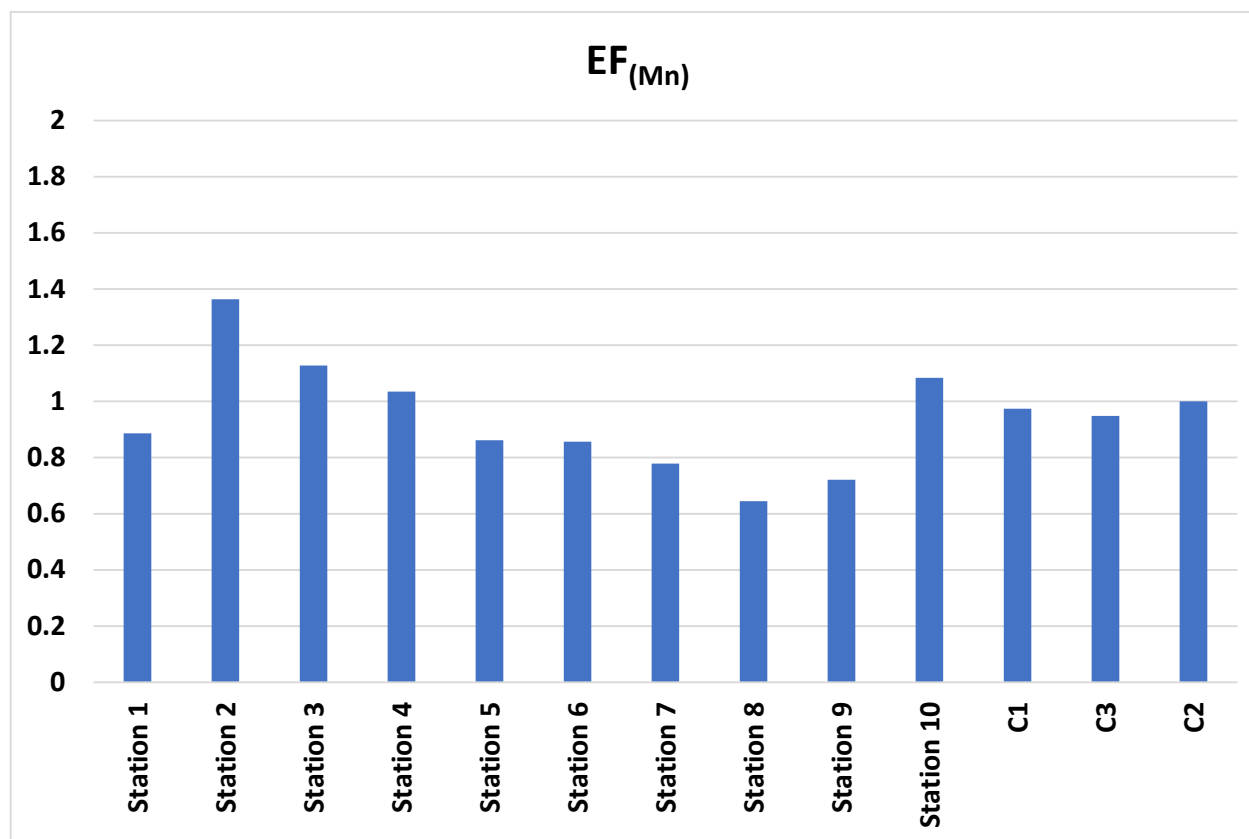


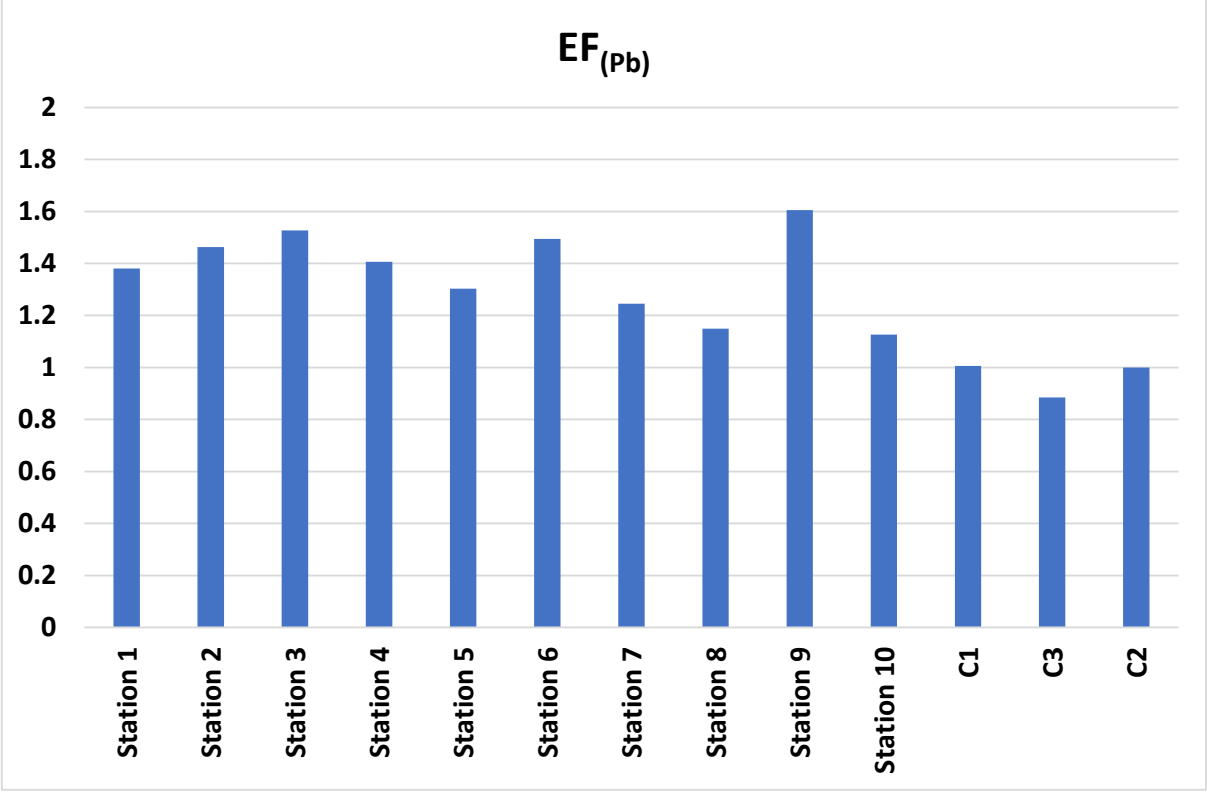
Supplementary figure S1. EF for AI.



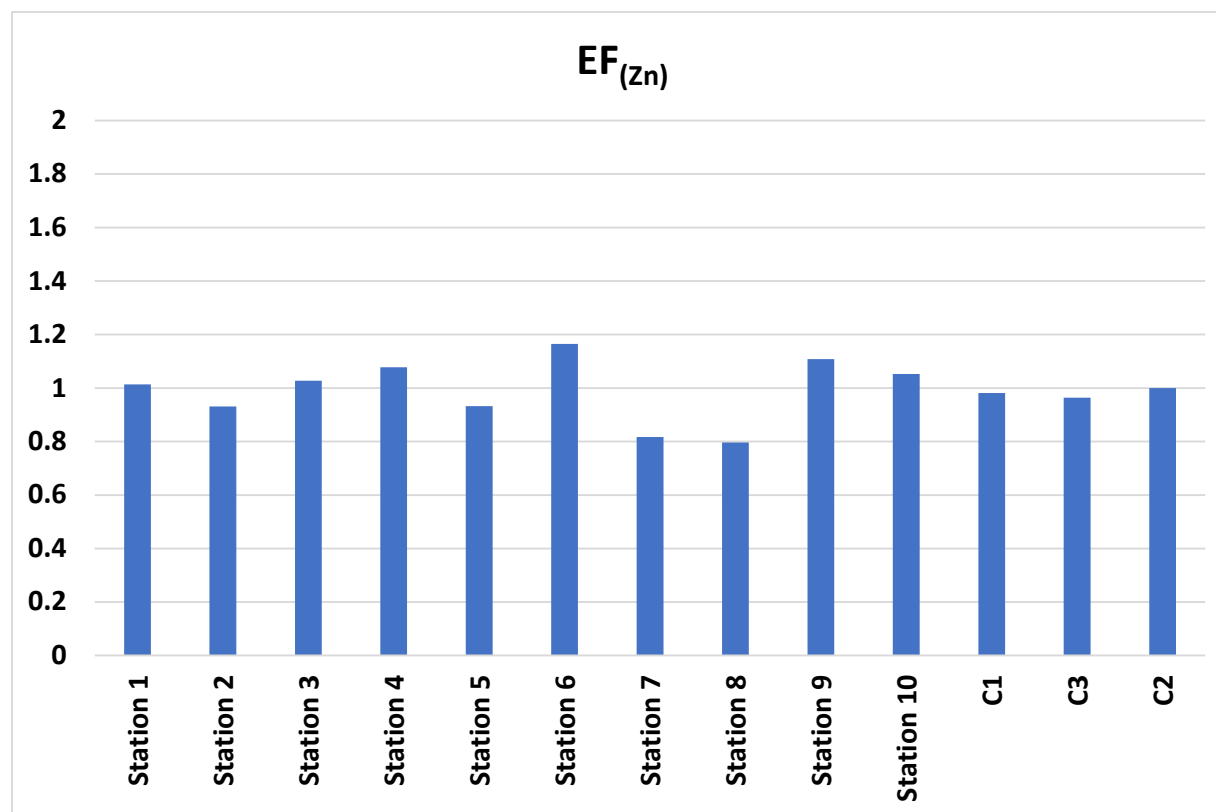
Supplementary figure S2. EF for Cr.



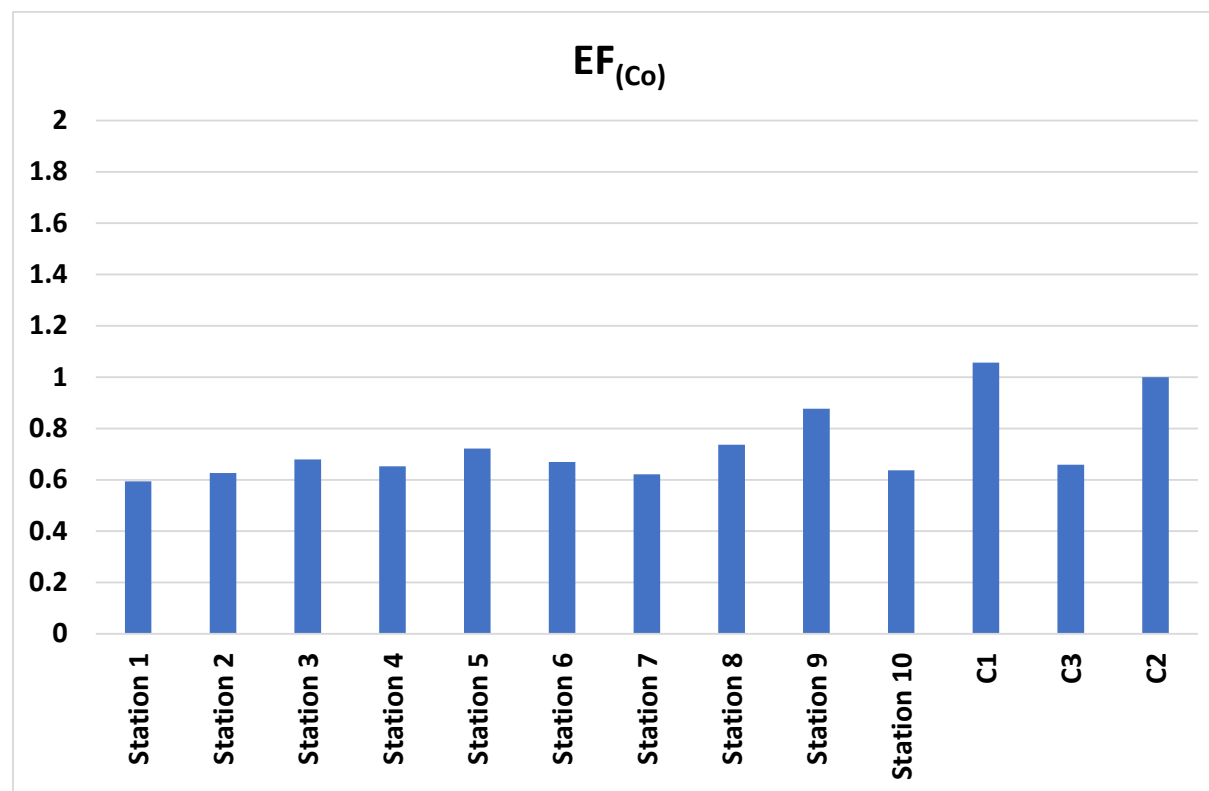
Supplementary figure S3. EF for Mn.



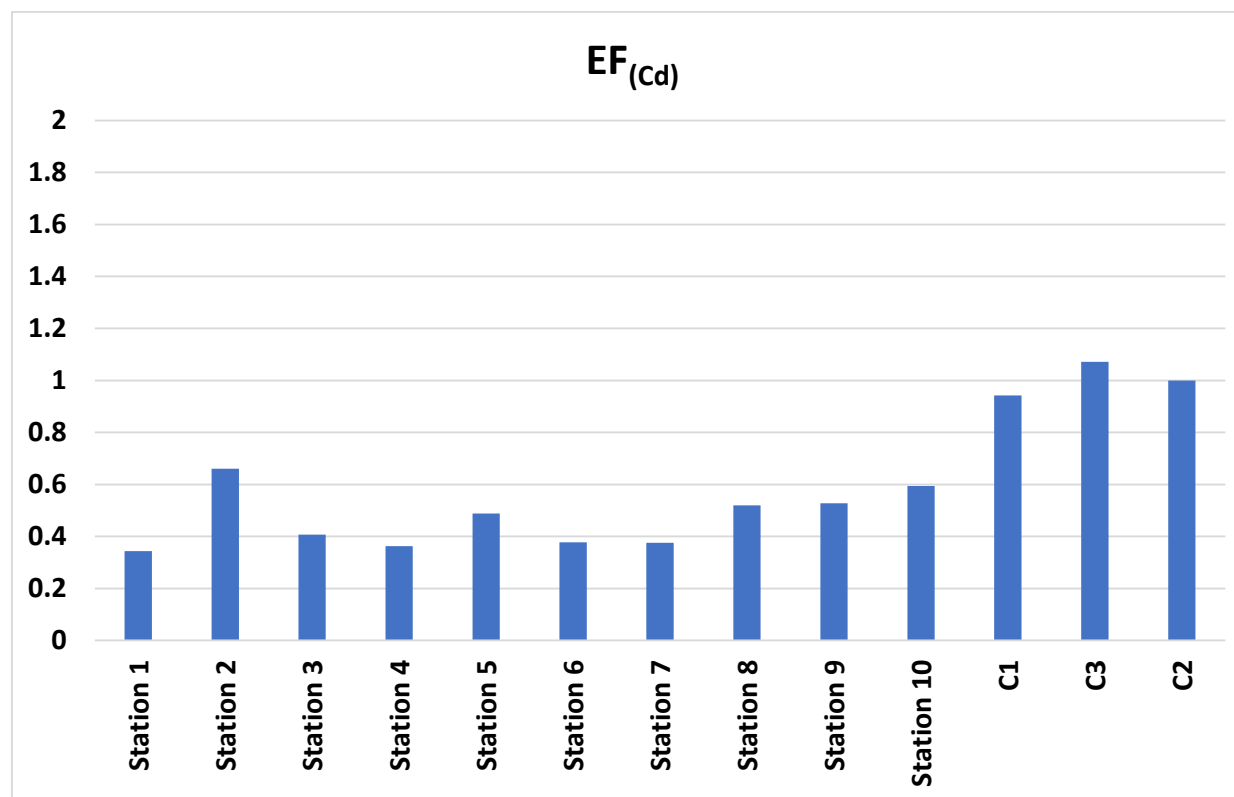
Supplementary figure S4. EF for Pb.



Supplementary figure S5. EF for Zn.



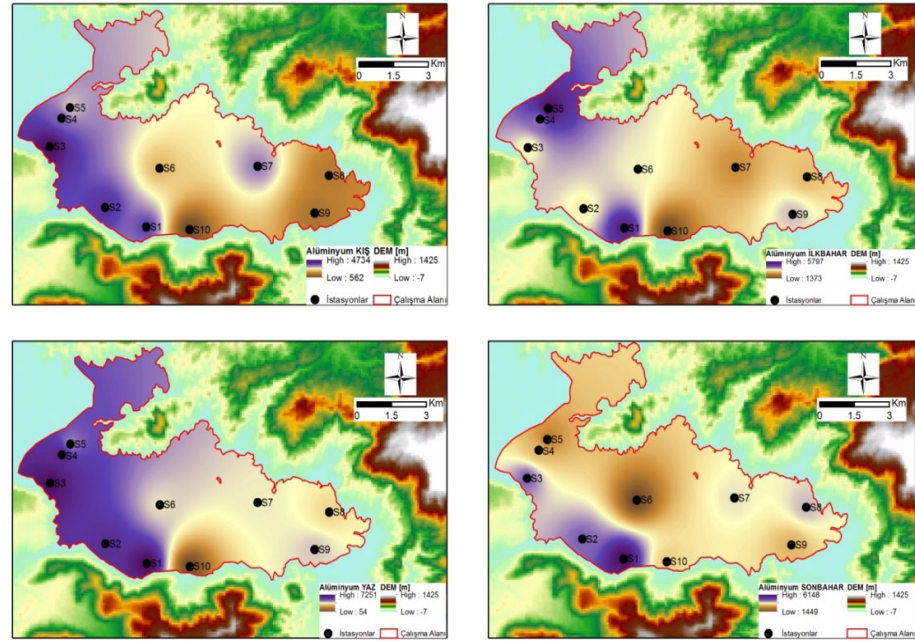
Supplementary figure S6. EF for Co.



Supplementary figure S7. EF for Cd.

Supplementary table S1. Aluminum values obtained from sediment samples taken from 10 stations in Bafa Lake during 4 seasons. (mg kg⁻¹ dry weight).

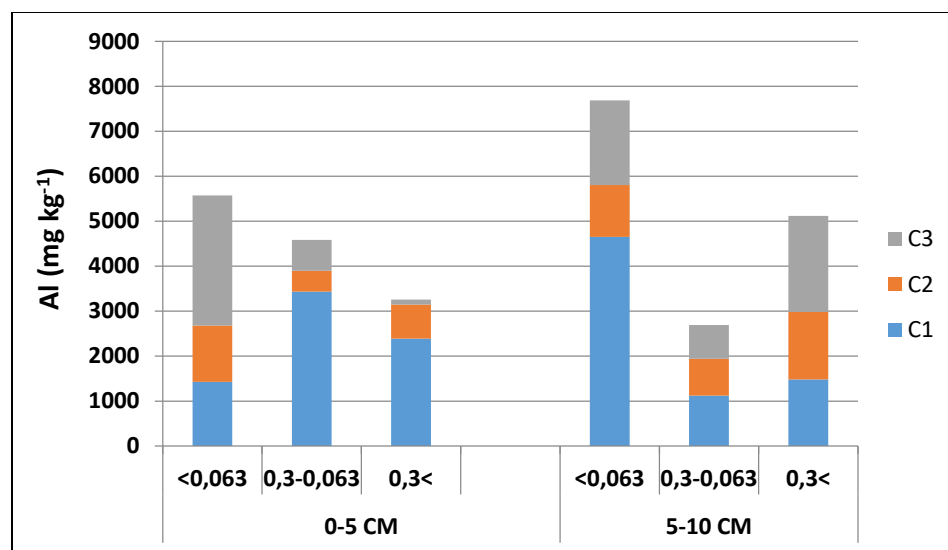
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	5396.91	3452.64	3526.14	4322.83	5797.46	3652.45	2540.90	2985.21	3919.11	1373.52	3696.72
SUMMER	7251.38	6089.21	7177.19	6411.06	4696.83	3897.31	3811.02	3096.29	4122.06	54.03	4660.64
FALL	6149.08	4732.94	4729.78	3165.31	2459.97	1449.56	3950.40	4180.76	3066.66	3309.59	3719.40
WINTER	3687.33	3939.21	4734.15	3511.71	2891.81	2060.73	3282.17	1387.48	1258.27	562.73	2731.56
Average (Sta.)	5621.17	4553.50	5041.82	4352.73	3961.52	2765.01	3396.12	2912.44	3091.53	1324.97	



Supplementary figure S8. Map of Al values detected seasonally in sediment samples from 10 stations in Lake Bafa.

Supplementary table S2. Aluminum values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

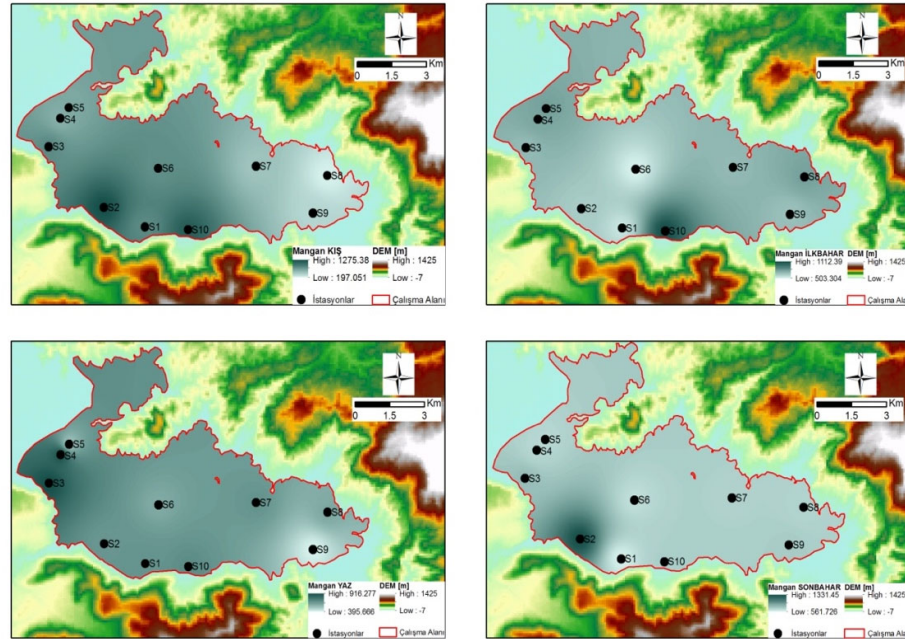
	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	1427.135	3437.213	2388.352	4650.623	1122.839	1479.238
C ₂	1250.95	460.106	759.0041	1155.902	817.7798	1505.069
C ₃	2895.472	687.0103	110.5496	1881.308	752.523	2132.149



Supplementary figure S9. Cumulative Al concentrations at different depths in core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

Supplementary table S3. Manganese values obtained from sediment samples taken from 10 stations in Bafa Lake during 4 seasons (mg kg⁻¹ dry weight).

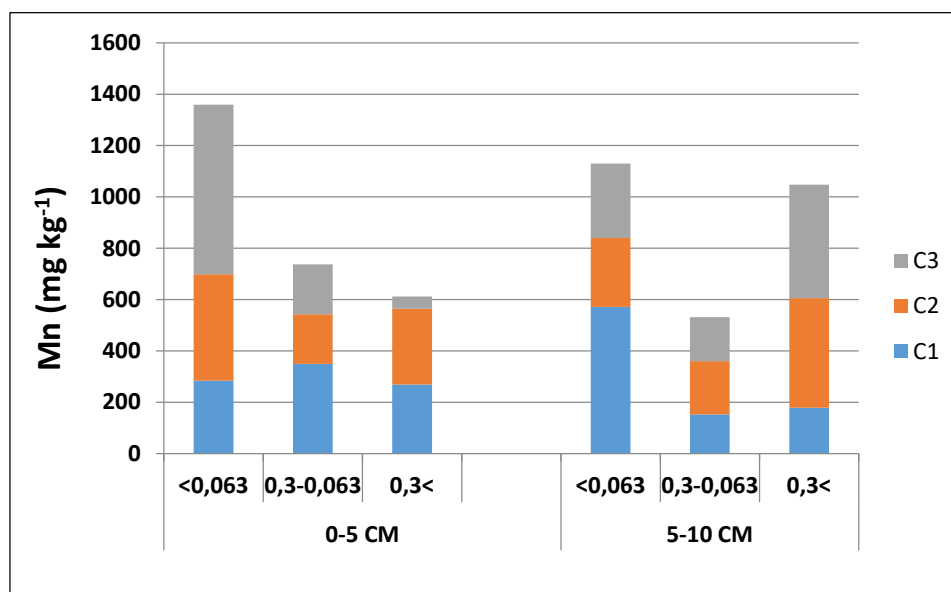
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	536.45	626.95	682.17	757.26	779.37	503.30	688.26	772.31	660.22	1112.42	711.87
SUMMER	673.44	658.78	916.28	903.56	510.89	597.24	672.27	607.26	395.65	695.26	663.06
FALL	561.70	1331.47	778.60	667.52	664.73	634.43	694.80	681.84	717.59	705.53	743.82
WINTER	819.11	1275.39	833.91	575.13	626.82	792.10	455.12	197.05	352.17	1165.27	709.21
Average (Sta.)	647.68	973.15	802.74	725.87	645.45	631.77	627.61	564.62	531.41	919.62	



Supplementary figure S10. Map of seasonally determined Mn values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S4. Manganese values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

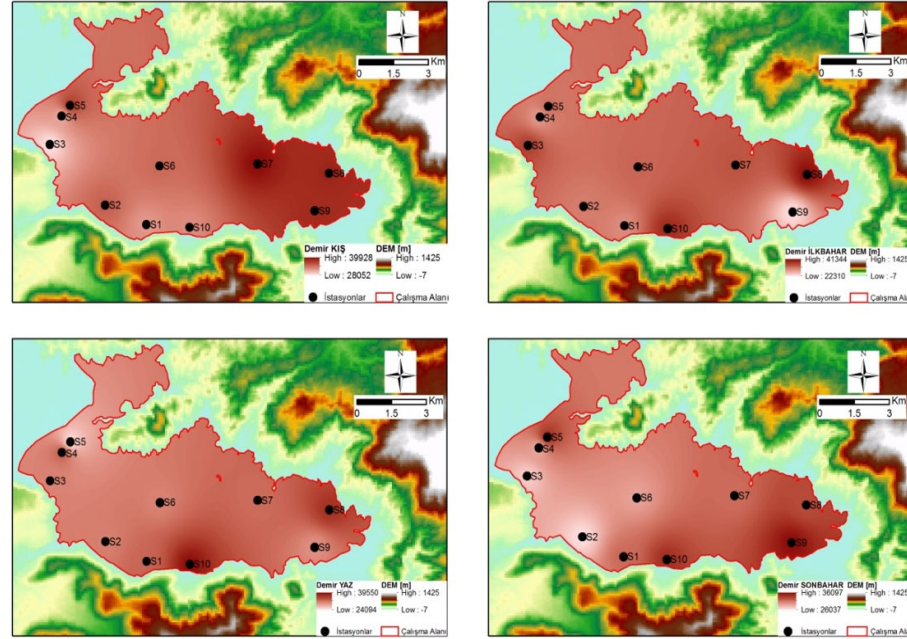
	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	216.27	266.43	204.85	439.93	117.70	137.34
C ₂	326.20	151.63	232.49	207.66	160.64	331.11
C ₃	512.54	151.04	136.75	228.70	134.91	348.41



Supplementary figure S11. Cumulative Mn concentrations at different depths in core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

Supplementary table S5. Iron values obtained from sediment samples taken from 10 stations in Bafa Lake during 4 seasons. (mg kg⁻¹ dry weight).

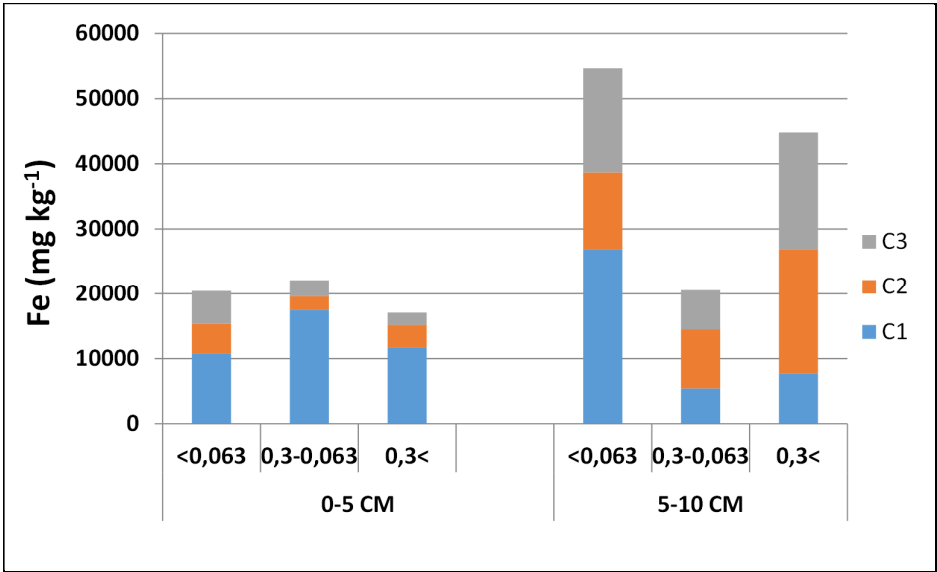
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	29118.07	30566.32	36515.00	27892.03	32028.99	32847.46	34601.36	41345.00	22308.95	38617.39	32584.06
SUMMER	32664.07	30534.57	30342.95	33200.67	24092.52	30286.30	32107.89	36931.25	29339.54	39551.37	31905.11
FALL	31428.16	26037.76	26830.40	28180.39	34677.49	28701.48	31190.30	32934.29	36097.41	34521.91	31059.96
WINTER	31717.71	34862.91	28052.11	30665.91	37293.24	34327.91	39928.57	38582.02	38212.60	32366.88	34600.99
Average (Sta.)	31232.00	30500.39	30435.12	29984.75	32023.06	31540.79	34457.03	37448.14	31489.62	36264.39	



Supplementary figure S12. Map of seasonally determined Fe values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S6. Iron values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg⁻¹ dry weight).

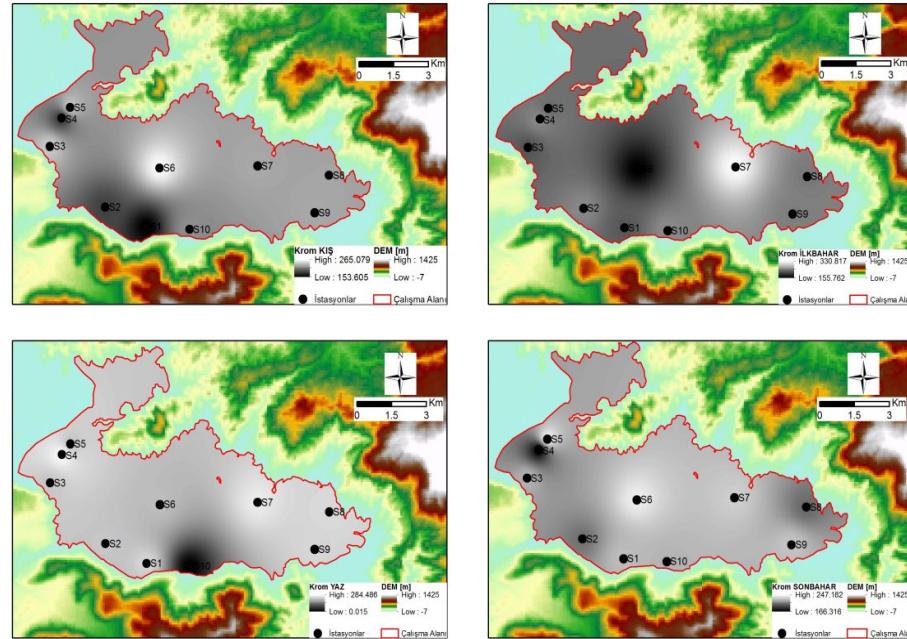
	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	8215.11	13290.86	8909.05	25585.27	5140.31	7337.75
C ₂	6846.73	23149.72	5226.38	15714.73	4379.64	9297.94
C ₃	7154.27	19425.41	5160.28	13490.24	8568.81	9669.71



Supplementary figure S13. Cumulative Fe concentrations at different depths in core samples taken from 3 stations in Lake Bafa (mg kg⁻¹ dry weight).

Supplementary table S7. Chromium values obtained from sediment samples taken from 10 stations in Bafa Lake during 4 seasons. (mg kg⁻¹ dry weight).

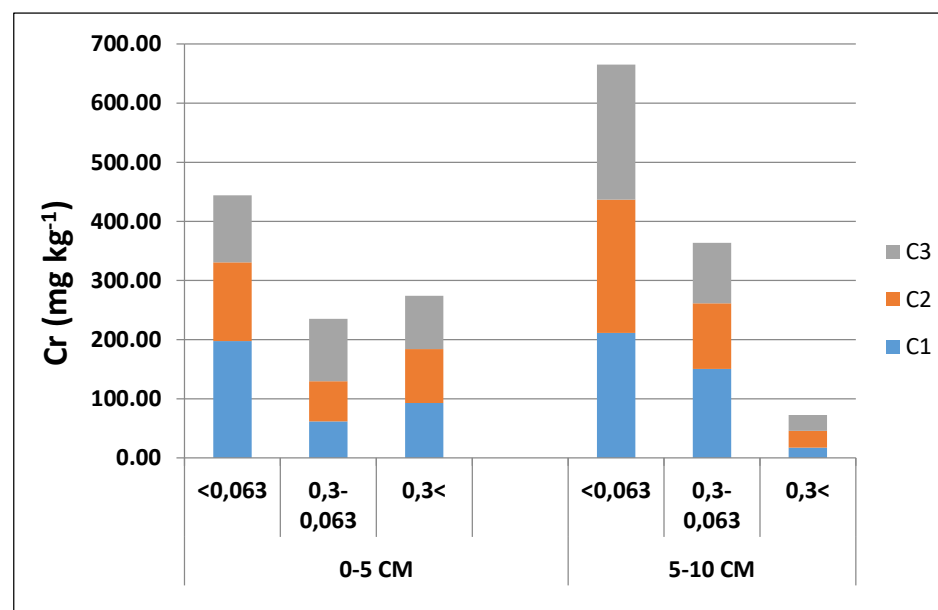
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	217.02	251.33	214.36	252.38	230.35	155.76	330.82	239.56	242.74	252.81	238.71
SUMMER	241.75	222.49	220.95	284.50	218.07	211.87	264.53	244.27	240.54	LOD	238.77
FALL	226.81	202.44	224.21	166.30	247.20	242.66	232.24	199.73	229.21	223.68	219.45
WINTER	153.60	182.28	243.11	176.43	243.19	265.08	227.91	225.99	227.87	217.25	216.27
Average (Sta.)	209.79	214.63	225.6577	219.90	234.70	218.84	263.87	227.39	235.09	231.25	



Supplementary figure S14. Map of seasonally determined Cr values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S8. Chromium values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

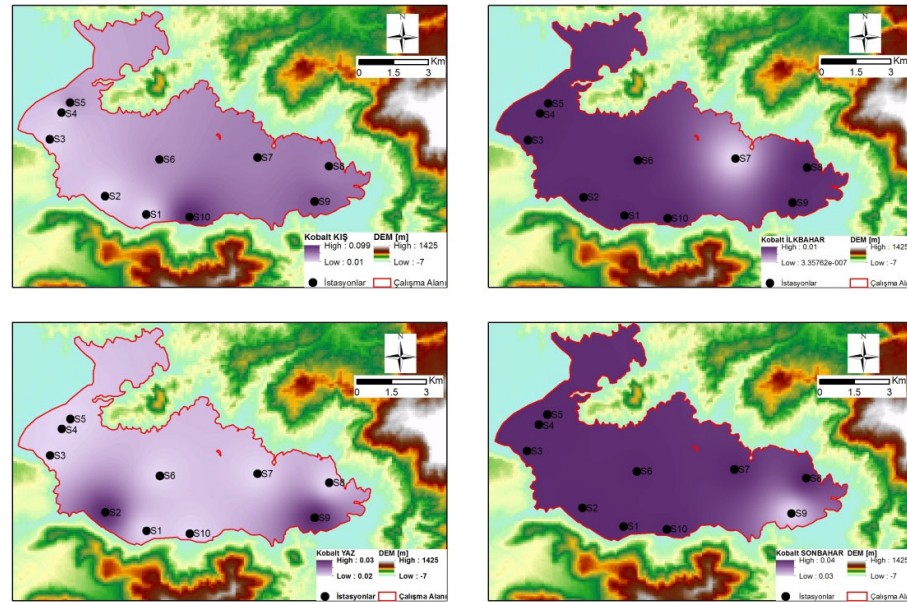
	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	197.56	61.71	92.83	211.60	150.38	17.45
C ₂	132.98	68.14	91.06	225.10	110.96	28.28
C ₃	113.66	105.29	90.32	228.47	102.47	26.66



Supplementary figure S15. Cumulative Cr concentrations at different depths in core samples taken from 3 stations in Lake Bafa (mg kg⁻¹ dry weight).

Supplementary table S9. Cobalt values obtained from sediment samples taken from 10 stations in Lake Bafa during 4 seasons. (mg kg⁻¹ dry weight).

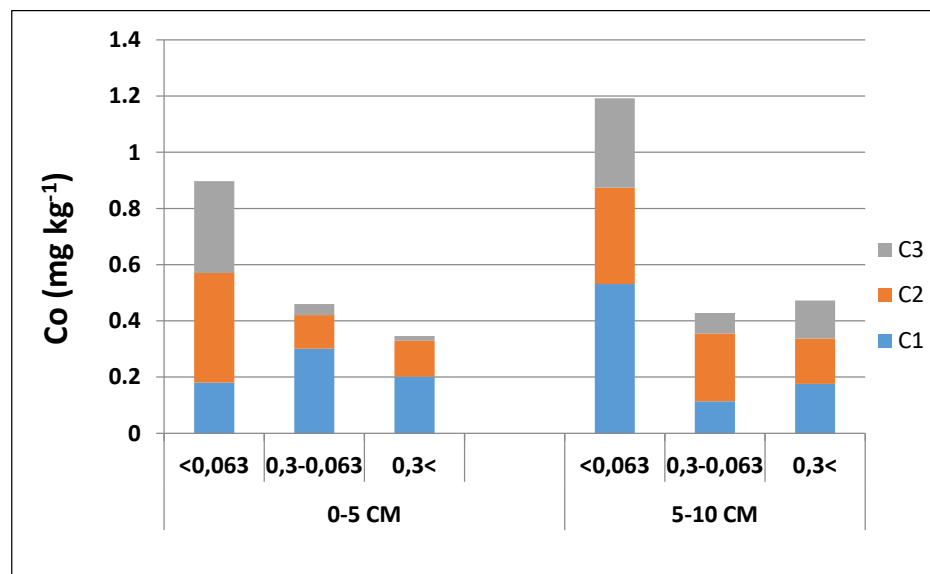
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	0.22	0.62	0.43	0.17	0.36	0.22	0.62	0.43	0.17	0.36	0.22
SUMMER	0.17	0.73	0.46	0.13	0.37	0.17	0.73	0.46	0.13	0.37	0.17
FALL	LOD	0.61	0.46	0.14	0.40	LOD	0.61	0.46	0.14	0.40	0.44
WINTER	0.24	0.65	0.45	0.18	0.38	0.24	0.65	0.45	0.18	0.38	0.24
Average (Sta.)	0.19	0.62	0.44	0.42	0.19	0.62	0.44	0.42	0.19	0.62	



Supplementary figure S16. Map of seasonally determined cobalt values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S10. Cobalt values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

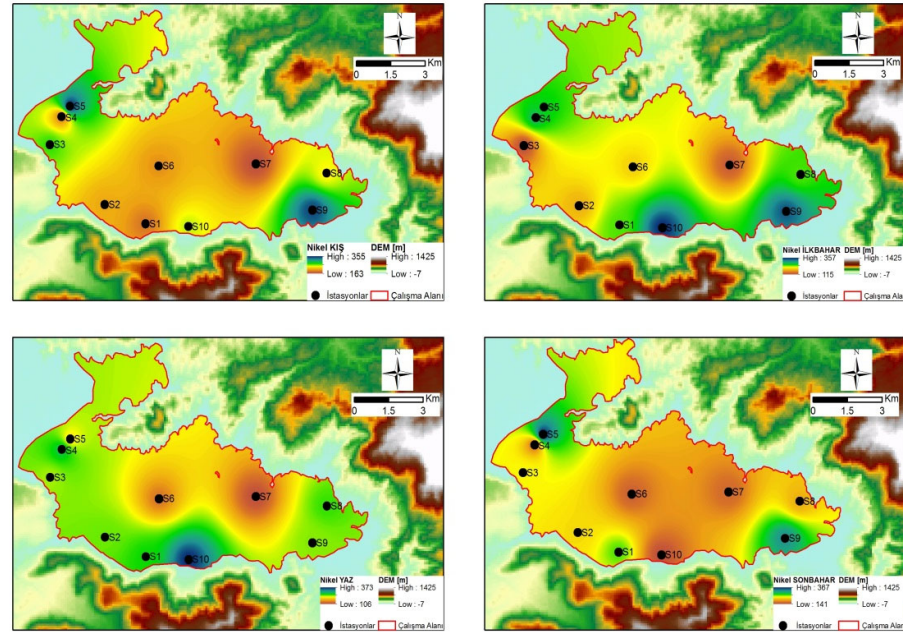
	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	0.18	0.30	0.20	0.53	0.11	0.18
C ₂	0.39	0.12	0.13	0.34	0.24	0.16
C ₃	0.33	0.04	0.02	0.32	0.07	0.14



Supplementary figure S17. Cumulative cobalt concentrations at different depths in core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

Supplementary table S11. Nickel values obtained from sediment samples taken from 10 stations in Bafa Lake during 4 seasons (mg kg⁻¹ dry weight).

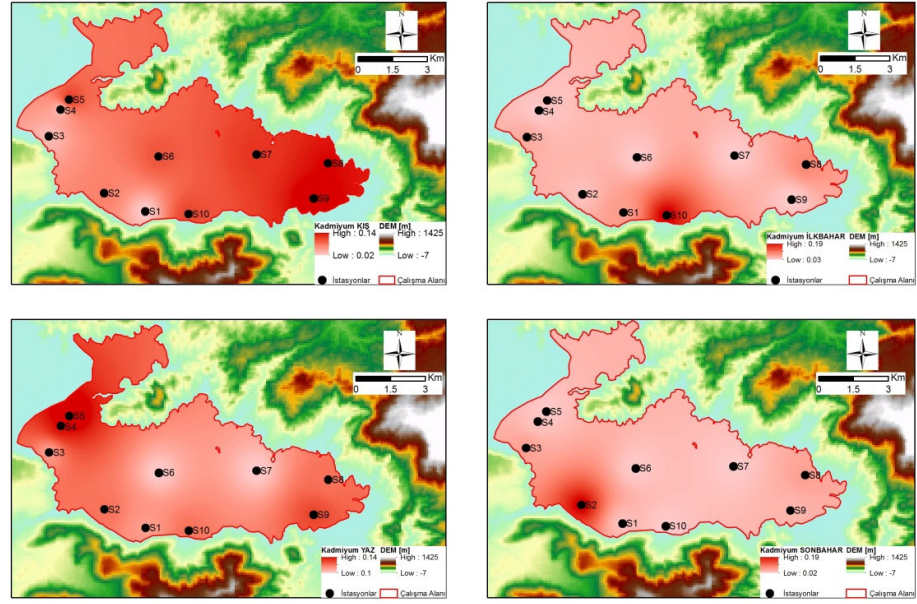
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	243.65	174.74	115.96	283.43	264.87	192.03	126.24	245.28	337.74	357.22	234.12
SUMMER	264.45	243.20	230.36	287.49	203.68	137.60	106.92	255.03	237.16	373.48	233.94
FALL	262.58	217.63	231.21	162.34	367.87	154.53	159.48	195.22	325.14	141.28	221.73
WINTER	185.78	206.71	270.20	186.07	355.66	197.50	163.45	238.36	346.59	248.00	239.83
Average (Sta.)	239.12	210.57	211.93	229.83	298.02	170.42	139.02	233.47	311.66	280.00	



Supplementary figure S18. Map of seasonally determined Ni values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S12. Cadmium values obtained from sediment samples taken from 10 stations in Lake Bafa during 4 seasons (mg kg⁻¹ dry weight).

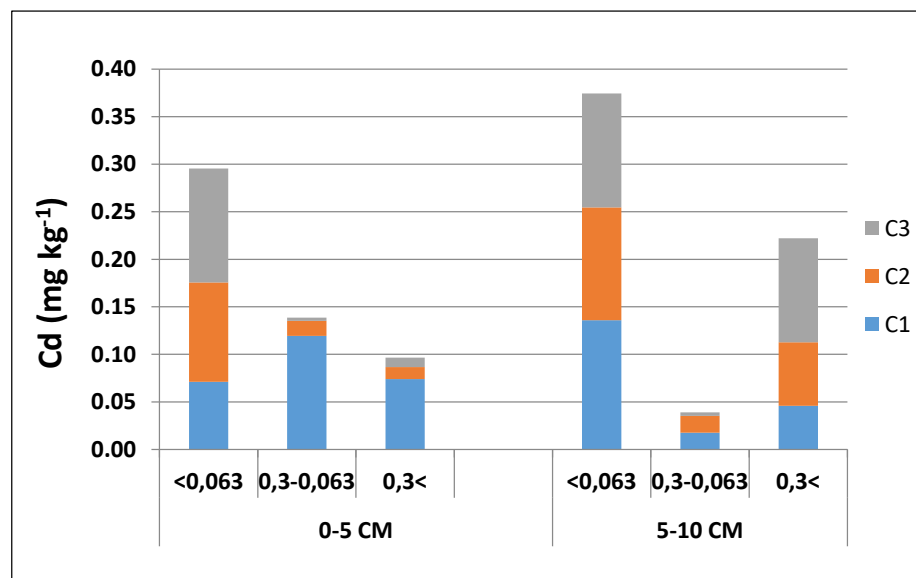
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	0.07	0.04	0.06	0.03	0.04	0.03	0.03	0.09	0.03	0.20	0.06
SUMMER	0.11	0.12	0.11	0.14	0.15	0.10	0.10	0.12	0.13	0.12	0.12
FALL	0.03	0.20	0.06	0.03	0.02	0.02	0.02	0.06	0.04	0.02	0.05
WINTER	0.02	0.07	0.03	0.03	0.12	0.10	0.12	0.14	0.15	0.11	0.09
Average (Sta.)	0.06	0.11	0.07	0.06	0.08	0.06	0.07	0.10	0.09	0.11	



Supplementary figure S19. Map of seasonally determined Cd values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S13. Cadmium values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

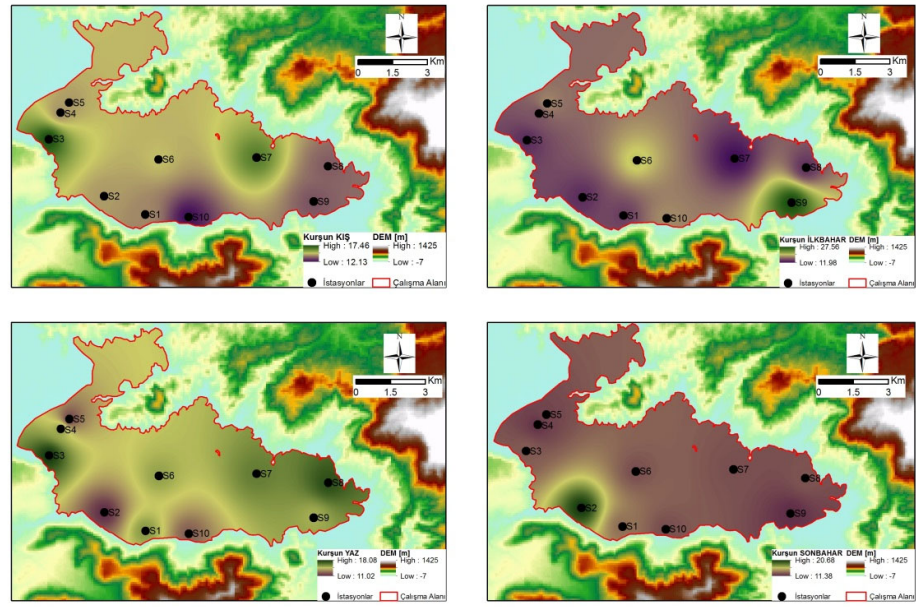
	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	0.07	0.12	0.07	0.14	0.02	0.05
C ₂	0.10	0.02	0.01	0.12	0.02	0.07
C ₃	0.12	0.00	0.01	0.12	0.00	0.11



Supplementary figure S20. Cumulative Cd concentrations at different depths in core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

Supplementary table S14. Lead values obtained from sediment samples taken from 10 stations in Bafa Lake during 4 seasons (mg kg⁻¹ dry weight).

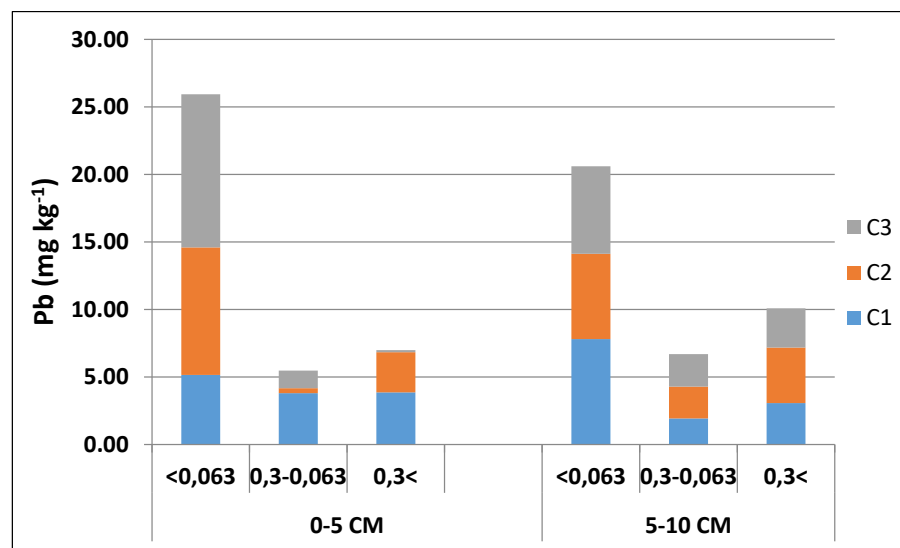
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	14.31	13.57	13.50	15.12	17.46	20.23	11.98	13.72	27.57	17.52	16.50
SUMMER	15.64	11.02	18.09	15.48	11.67	15.41	16.30	17.48	15.15	12.28	14.85
FALL	13.55	20.69	12.91	11.56	12.31	12.55	12.56	12.75	11.38	12.51	13.28
WINTER	13.97	14.19	17.47	14.06	14.19	14.62	16.36	13.40	13.27	12.13	14.37
Average (Sta.)	14.37	14.87	15.49	14.05	13.91	15.70	14.30	14.34	16.84	13.61	



Supplementary figure S21. The map of seasonally determined Pb values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S15. Lead values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

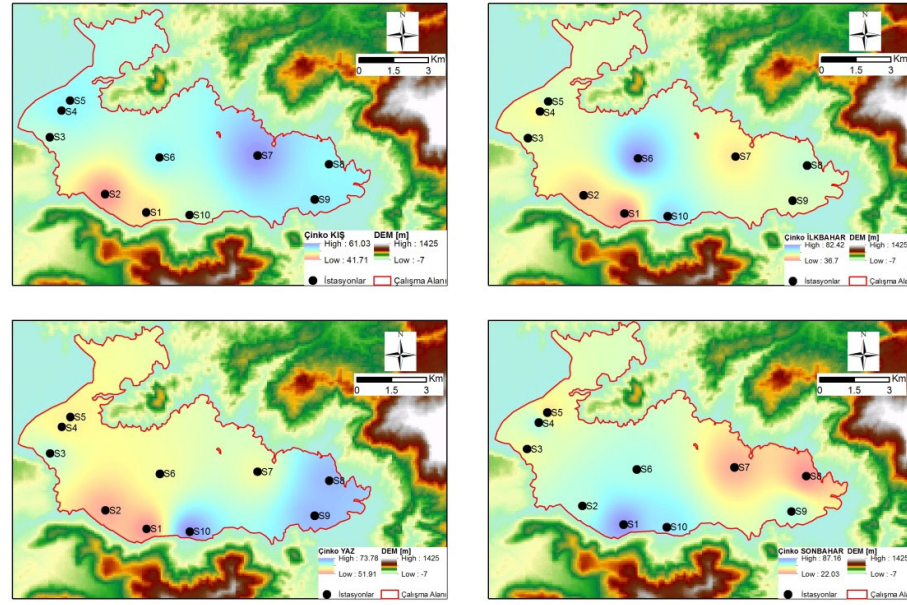
	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	5.15	3.79	3.85	7.80	1.93	3.07
C ₂	9.44	0.38	2.98	6.32	2.36	4.11
C ₃	11.34	1.30	0.16	6.48	2.41	2.91



Supplementary figure S22. Cumulative Pb concentrations at different depths in core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

Supplementary table S16. Zinc values obtained from sediment samples taken from 10 stations in Bafa Lake during 4 seasons. (mg kg⁻¹ dry weight).

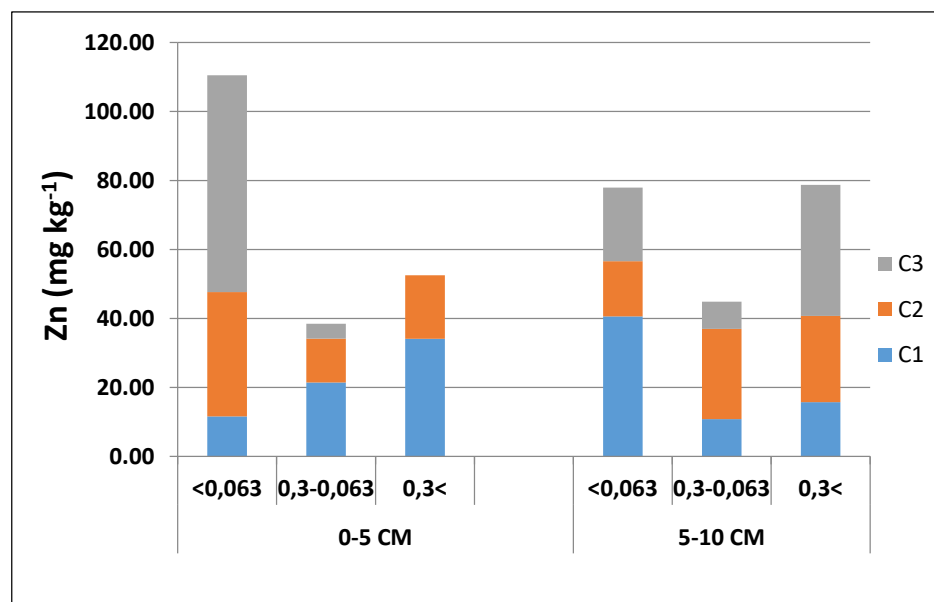
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10	Average (Monthly)
SPRING	36.70	45.30	56.34	50.29	59.31	82.43	48.82	61.07	57.19	72.65	57.01
SUMMER	51.91	53.38	64.30	58.52	58.12	60.01	60.32	71.38	71.39	73.79	62.31
FALL	87.17	58.66	46.36	62.71	36.81	60.61	27.20	22.03	60.68	69.87	53.21
WINTER	46.23	41.71	52.18	55.10	55.00	54.68	61.04	54.67	55.45	51.28	52.73
Average (Sta.)	55.50	49.76	54.80	56.66	52.31	64.43	49.35	52.29	61.18	66.90	



Supplementary figure S23. The Map of seasonally determined Zn values in sediment samples from 10 stations in Lake Bafa.

Supplementary table S17. Zinc values obtained from sediment core samples taken from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

	0-5 cm			5-10 cm		
	<0.063	0.3-0.063	0.3<	<0.063	0.3-0.063	0.3<
C ₁	11.61	21.44	34.10	40.61	10.82	15.73
C ₂	36.02	12.72	18.41	15.97	26.15	25.04
C ₃	62.84	4.32	0.00	21.36	7.86	37.95



Supplementary figure S24. Cumulative Zn concentrations at different depths in core samples from 3 stations in Lake Bafa (mg kg^{-1} dry weight).

Physical and Chemical Characteristics of Lake Water

The monthly mean values of the main meteorological parameters during the sampling period (2013-2014), were obtained by the Ministry of Forestry and Water Affairs, Aydın Provincial Directorate (Supplementary table 18.).

Supplementary table S18. Data on meteorological events in the 1-year period (2013-2014) in Lake Bafa (Anonymous, 2015).

	Temperature (°C)	Humidity (%)	Wind speed (m s ⁻²)	Areal precipitation (kg m ⁻²)
JANUARY	11.7	81.9	2.0	121.4
FEBRUARY	11.9	75.4	2.5	39.4
MARCH	13.1	68.6	3.1	88.8
APRIL	16.2	72.4	2.2	107.6
MAY	20.2	66.2	3.2	27.8
JUNE	24.9	55.0	3.3	53.0
JULY	27.2	54.5	4.2	1.0
AUGUST	28.2	55.4	4.0	18.4
SEPTEMBER	23.6	62.3	3.1	36.8
OCTOBER	19.6	65.8	3.3	37.0
NOVEMBER	14.3	69.8	2.5	81.2
DECEMBER	9.3	56.7	3.3	16.0

The physico-chemical parameters measured in the surface water samples taken from 10 different points during 1 year from Lake Bafa are reported in Supplementary table 19 and 20.

Supplementary table S19. Monthly mean of physico-chemical parameters measured from 10 Stations in Lake Bafa.

	Water temperature (°C)	Conductivity ($\mu\text{S cm}^{-1}$)	TDS (g L^{-1})	Salinity (‰)	Oxygen saturation (%)	DO (mg L^{-1})	pH
JANUARY	11.78	18188	11.82	10.81	118.38	12.41	8.91
FEBRUARY	15.00	17417	15.50	11.13	96.51	9.54	8.74
MARCH	18.22	16646	19.17	11.44	74.64	6.68	8.58
APRIL	22.14	15912	20.32	11.49	76.88	6.88	8.41
MAY	23.30	17547	15.27	10.68	67.77	5.48	8.16
JUNE	25.70	18858	12.10	11.01	145.92	11.18	8.32
JULY	27.55	20215	12.97	11.27	67.41	6.03	8.31
AUGUST	27.63	20280	13.01	11.30	62.74	5.62	7.74
SEPTEMBER	23.04	18540	12.75	11.38	98.26	8.67	7.97
OCTOBER	18.45	16801	12.49	11.46	133.78	11.73	8.19
NOVEMBER	13.90	17137	12.54	11.42	119.06	11.38	8.48
DECEMBER	9.35	19570	12.72	11.64	131.45	13.82	9.67

Supplementary table S20. The mean of physico-chemical parameters of 10 Stations in Lake Bafa in terms of Stations.

	Water temperature (°C)	Conductivity ($\mu\text{S cm}^{-1}$)	TDS (g L^{-1})	Salinity (‰)	Oxygen Saturation (%)	DO (mg L^{-1})	pH
Station 1	19.68	17992	14.13	11.19	93.08	8.46	8.29
Station 2	19.44	17791	14.06	11.23	103.29	9.25	8.45
Station 3	18.63	17735	14.25	11.25	100.63	9.32	8.46
Station 4	18.61	17896	14.32	11.29	96.15	8.96	8.44
Station 5	19.64	18367	14.41	11.25	95.31	9.07	8.45
Station 6	19.86	18241	14.34	11.31	102.98	9.35	8.55
Station 7	20.31	18300	14.25	11.21	117.13	10.55	8.58
Station 8	20.32	18299	14.20	11.27	89.72	8.21	8.46
Station 9	20.19	18255	14.20	11.29	91.00	8.46	8.46
Station 10	20.07	18044	14.06	11.23	104.71	9.54	8.44

Supplementary table S21. Water temperature values (°C) by month, measured from 10 stations in Lake Bafa.

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	12.4	11.8	11.8	10.1	9.6	12.4	12.5	12.3	12.4	12.5
FEBRUARY	15.7	15.0	14.6	13.5	14.0	15.3	15.3	15.4	15.5	15.9
MARCH	19.0	18.1	17.4	16.9	18.3	18.1	18.0	18.5	18.6	19.4
APRIL	22.9	21.9	20.7	21.1	24.0	21.4	21.2	22.3	22.3	23.6
MAY	23.1	23.1	22.4	22.4	23.4	23.2	23.7	24.6	23.6	23.9
JUNE	25.2	25.9	23.2	24.5	25.7	25.9	27.0	26.9	27.0	25.7
JULY	26.5	26.7	25.1	26.7	28.8	28.0	29.4	28.8	28.4	27.2
AUGUST	26.6	26.7	25.1	26.8	28.9	28.1	29.5	28.9	28.5	27.3
SEPTEMBER	22.5	22.5	21.8	22.4	23.7	23.3	24.1	23.7	23.5	22.9
OCTOBER	18.4	18.3	18.4	18.0	18.6	18.6	18.7	18.5	18.6	18.4
NOVEMBER	14.1	13.8	13.9	13.0	13.1	14.2	14.3	14.1	14.2	14.2
DECEMBER	9.8	9.4	9.3	8.0	7.6	9.9	9.9	9.8	9.8	9.9

Supplementary table S22. Dissolved oxygen values by months measured from 10 stations in Lake Bafa. (mg L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	9.31	11.26	11.54	11.62	10.27	12.43	12.64	11.73	12.93	13.33
FEBRUARY	8.30	9.34	8.89	8.76	11.96	9.68	9.32	8.44	10.23	10.49
MARCH	7.29	7.43	6.25	5.91	6.64	6.93	6.00	5.15	7.53	7.66
APRIL	7.51	7.65	6.44	6.09	6.84	7.14	6.18	5.30	7.76	7.89
MAY	5.89	5.53	5.91	6.14	4.61	6.20	6.85	6.04	1.84	5.83
JUNE	10.26	13.47	11.42	11.87	8.66	16.50	17.46	6.37	5.15	10.62
JULY	6.38	6.58	5.67	5.42	5.95	6.35	5.56	4.88	6.67	6.86
AUGUST	5.95	6.06	5.22	5.07	5.73	5.88	5.15	4.56	6.21	6.33
SEPTEMBER	7.62	8.80	9.80	8.93	6.87	7.97	10.93	8.59	8.41	8.82
OCTOBER	9.29	11.53	14.38	12.80	8.01	10.06	16.70	12.62	10.62	11.31
NOVEMBER	9.01	11.18	13.95	12.42	7.77	9.76	16.20	12.24	10.30	10.97
DECEMBER	14.77	12.11	12.41	12.50	10.58	13.37	13.60	12.62	13.91	14.34

Supplementary table S23. Oxygen saturation values by months measured from 10 stations in Lake Bafa (%).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	93.20	114.89	107.92	108.01	115.09	118.51	120.84	112.75	123.07	127.53
FEBRUARY	88.05	98.99	88.26	86.11	115.74	97.76	93.72	85.28	103.63	107.57
MARCH	82.90	83.10	68.60	64.20	74.40	77.00	66.60	57.80	84.20	87.60
APRIL	85.39	85.59	70.66	66.13	76.63	79.31	68.60	59.53	86.73	90.23
MAY	70.30	67.90	72.50	75.20	57.00	77.00	85.60	77.10	23.10	72.00
JUNE	132.40	177.50	142.90	151.50	113.20	213.10	234.30	86.20	69.30	138.80
JULY	72.58	73.61	62.18	58.85	66.67	70.59	61.74	54.77	74.58	78.50
AUGUST	67.64	67.79	57.33	55.03	64.20	65.29	57.17	51.16	69.44	72.38
SEPTEMBER	86.02	99.30	110.76	99.71	77.65	90.60	124.48	97.78	95.57	100.74
OCTOBER	104.40	130.80	164.20	144.40	91.10	115.90	191.80	144.40	121.70	129.10
NOVEMBER	92.92	116.41	146.14	128.52	81.08	103.15	170.70	128.52	108.31	114.90
DECEMBER	141.20	123.60	116.10	116.20	119.00	127.50	130.00	121.30	132.40	137.20

Supplementary table S24. Chlorophyll-a amounts obtained from 10 stations in Lake Bafa for 6 months (May-October 2014) (mg L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
MAY	1.35	0.51	6.87	2.55	2.51	4.36	6.51	18.43	2.36	0.79
JUNE	3.38	3.46	14.01	15.95	13.37	8.58	10.14	33.57	30.58	2.88
JULY	2.60	4.00	15.56	14.16	13.84	6.21	13.62	35.57	32.68	3.16
AUGUST	1.06	1.23	6.27	7.03	4.90	2.44	7.83	16.42	12.76	3.86
SEPTEMBER	13.33	4.42	18.73	18.77	14.80	5.79	14.30	33.64	27.24	4.37
OCTOBER	3.82	4.28	13.72	16.74	11.37	10.19	6.52	27.82	32.55	3.08

Supplementary table S25. pH values by months measured from 10 stations in Lake Bafa.

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	8.16	9.04	9.03	9.05	9.07	8.91	8.95	8.99	8.93	8.94
FEBRUARY	8.30	8.78	8.73	8.76	8.87	8.78	8.80	8.75	8.90	8.78
MARCH	8.43	8.52	8.44	8.47	8.66	8.64	8.65	8.51	8.87	8.62
APRIL	8.26	8.35	8.27	8.30	8.49	8.47	8.48	8.34	8.69	8.45
MAY	8.22	8.21	8.21	8.21	7.99	8.24	8.29	8.21	7.80	8.25
JUNE	8.22	8.45	8.24	8.27	8.14	8.55	8.60	8.26	8.14	8.31
JULY	8.26	8.24	8.29	8.35	8.42	8.65	8.28	8.19	8.24	8.20
AUGUST	7.70	7.59	7.64	7.81	8.11	8.00	7.67	7.65	7.67	7.56
SEPTEMBER	7.86	7.89	8.03	8.00	7.99	8.02	8.11	8.00	7.91	7.86
OCTOBER	8.02	8.19	8.42	8.20	7.88	8.04	8.55	8.35	8.14	8.15
NOVEMBER	8.36	8.41	8.54	8.12	8.03	8.65	8.97	8.56	8.61	8.53
DECEMBER	9.68	9.73	9.71	9.74	9.76	9.59	9.63	9.67	9.61	9.62

Supplementary table S26. Salinity values by months measured from 10 stations in Lake Bafa (‰).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	10.83	10.88	10.88	10.88	10.31	10.87	10.88	10.88	10.87	10.88
FEBRUARY	11.13	11.10	11.17	11.25	11.07	11.18	11.12	11.16	11.13	10.96
MARCH	11.42	11.31	11.47	11.61	11.83	11.49	11.37	11.45	11.40	11.05
APRIL	11.47	11.36	11.52	11.66	11.88	11.54	11.42	11.50	11.45	11.09
MAY	10.70	10.70	10.71	10.71	10.73	10.70	10.69	10.65	10.55	10.70
JUNE	10.96	10.98	11.02	10.99	11.13	10.98	11.00	11.03	11.04	10.98
JULY	11.07	11.31	11.24	11.32	11.35	11.31	11.11	11.31	11.29	11.36
AUGUST	11.11	11.34	11.28	11.36	11.38	11.35	11.15	11.35	11.33	11.39
SEPTEMBER	11.24	11.31	11.26	11.35	11.46	11.53	11.33	11.42	11.45	11.45
OCTOBER	11.37	11.29	11.25	11.33	11.54	11.70	11.51	11.50	11.56	11.51
NOVEMBER	11.35	11.42	11.48	11.36	11.25	11.37	11.23	11.33	11.78	11.65
DECEMBER	11.70	11.71	11.70	11.71	11.09	11.69	11.70	11.70	11.69	11.70

Supplementary table S27. TDS values by months measured from 10 stations in Lake Bafa (g L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	11.87	11.89	11.88	11.91	11.34	11.86	11.87	11.87	11.87	11.88
FEBRUARY	15.50	15.48	15.61	15.66	15.52	15.62	15.44	15.43	15.48	15.23
MARCH	19.12	19.07	19.35	19.42	19.70	19.37	19.01	18.99	19.09	18.58
APRIL	20.27	20.21	20.51	20.59	20.88	20.53	20.15	20.13	20.24	19.69
MAY	15.26	15.25	15.37	15.41	15.31	15.37	15.22	15.22	15.27	15.04
JUNE	12.06	12.07	12.08	12.07	12.21	12.06	12.10	12.13	12.15	12.06
JULY	12.66	12.43	13.04	13.16	13.68	13.02	13.19	12.98	12.76	12.79
AUGUST	12.70	12.46	13.09	13.21	13.71	13.07	13.24	13.02	12.80	12.82
SEPTEMBER	12.55	12.39	12.68	12.79	13.14	12.90	12.89	12.77	12.70	12.69
OCTOBER	12.40	12.32	12.27	12.37	12.56	12.73	12.54	12.53	12.59	12.56
NOVEMBER	12.45	12.37	12.33	12.43	12.62	12.78	12.59	12.58	12.65	12.61
DECEMBER	12.77	12.79	12.78	12.81	12.20	12.76	12.77	12.77	12.77	12.78

Supplementary table S28. The Change of ammonium nitrogen amounts by months measured for a year from 10 stations in Lake Bafa (mg L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	0.020	0.030	0.020	0.030	0.050	0.020	0.050	0.050	0.010	LOD
FEBRUARY	0.000	0.020	LOD	0.060	0.040	0.030	0.010	0.020	0.020	0.030
MARCH	0.110	0.110	0.080	0.090	0.090	0.090	0.080	0.110	0.160	0.100
APRIL	0.700	0.500	0.040	0.050	0.040	0.070	0.080	0.100	0.150	0.100
MAY	0.182	0.138	0.036	0.062	0.066	0.042	0.046	0.062	0.068	0.050
JUNE	0.050	0.070	0.120	LOD	0.030	0.030	0.050	0.710	0.960	0.090
JULY	0.051	0.074	0.144	LOD	0.030	0.029	0.045	0.738	1.056	0.096
AUGUST	0.056	0.082	0.166	LOD	0.040	0.035	0.053	0.805	1.299	0.117
SEPTEMBER	0.062	0.092	0.190	LOD	0.053	0.043	0.062	0.877	1.598	0.143
OCTOBER	0.330	0.280	0.390	0.430	0.200	0.330	0.290	0.220	0.380	0.300
NOVEMBER	0.149	0.130	0.111	0.073	0.068	0.065	0.070	0.338	0.518	0.095
DECEMBER	0.080	0.030	0.040	0.080	0.110	LOD	0.010	0.030	LOD	0.020

Supplementary table S29. The change of nitrite nitrogen by months measured for a year from 10 stations in Lake Bafa (mg L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	0.005	0.004	0.005	0.009	0.008	0.008	0.008	0.005	0.005	0.004
FEBRUARY	0.002	0.000	0.002	0.007	0.000	0.001	0.002	0.004	0.002	0.002
MARCH	0.004	0.002	0.002	0.001	0.002	0.003	0.005	0.002	0.014	0.006
APRIL	0.003	0.001	0.002	0.006	0.001	0.004	0.006	0.002	0.007	0.005
MAY	0.003	0.002	0.003	0.005	0.003	0.004	0.005	0.004	0.006	0.004
JUNE	0.038	0.033	0.001	0.001	0.025	0.029	0.009	0.011	0.013	0.034
JULY	0.039	0.035	0.001	0.001	0.025	0.028	0.008	0.011	0.014	0.036
AUGUST	0.043	0.039	0.001	0.001	0.033	0.034	0.009	0.012	0.018	0.044
SEPTEMBER	0.047	0.043	0.002	0.001	0.044	0.041	0.011	0.014	0.022	0.054
OCTOBER	0.043	0.027	0.012	0.041	0.187	0.059	0.008	0.023	0.022	0.025
NOVEMBER	0.009	0.005	0.002	0.008	0.037	0.012	0.002	0.005	0.004	0.005
DECEMBER	0.003	0.003	0.004	0.004	0.006	0.003	0.004	0.006	0.002	0.003

Supplementary table S30. The change of nitrate nitrogen values by months measured for a year from 10 stations in Lake Bafa (mg L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	5.620	3.460	15.800	3.010	2.870	2.820	2.980	3.060	2.870	2.630
FEBRUARY	0.421	9.280	0.474	7.640	0.571	0.553	0.311	0.276	0.237	0.365
MARCH	0.287	0.390	0.223	0.259	0.284	0.491	0.261	0.621	0.369	0.307
APRIL	0.354	0.342	0.368	0.312	0.298	0.461	0.316	0.657	0.246	0.345
MAY	1.214	2.247	1.863	1.246	1.370	0.725	0.500	0.608	0.512	0.704
JUNE	1.010	1.710	0.300	0.208	1.850	0.512	0.179	0.251	0.231	0.633
JULY	1.030	1.796	0.360	0.198	1.832	0.492	0.159	0.261	0.254	0.677
AUGUST	0.773	1.418	0.281	0.152	1.355	0.256	0.078	0.110	0.114	0.528
SEPTEMBER	0.579	1.121	0.219	0.117	1.003	0.133	0.038	0.046	0.051	0.412
OCTOBER	0.469	0.440	0.490	0.695	0.498	0.417	0.589	0.439	0.325	0.324
NOVEMBER	0.477	0.528	0.534	0.734	0.561	0.515	0.606	0.455	0.372	0.407
DECEMBER	0.409	0.443	0.260	0.198	0.426	0.367	0.239	0.211	0.238	0.225

Supplementary table S31. The change of phosphate phosphorus values by months measured for a year from 10 stations in Lake Bafa (mg L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	4.220	1.680	0.109	0.103	0.117	3.620	0.090	1.720	0.156	0.617
FEBRUARY	0.049	0.045	0.052	4.740	0.924	0.054	0.007	0.054	0.023	0.054
MARCH	0.014	0.037	0.006	0.448	0.349	0.619	0.040	0.018	LOD	0.046
APRIL	0.012	0.045	0.006	0.612	0.449	0.586	0.040	0.019	0.012	0.035
MAY	1.385	0.409	0.037	1.226	0.832	1.073	0.467	0.383	0.364	0.552
JUNE	0.049	0.200	1.100	0.361	0.972	1.240	0.771	1.300	1.200	0.372
JULY	0.050	0.210	1.320	0.343	0.962	1.190	0.686	1.352	1.320	0.398
AUGUST	0.055	0.235	1.518	0.422	1.289	1.452	0.810	1.474	1.624	0.486
SEPTEMBER	0.041	0.186	1.184	0.325	0.954	0.755	0.397	0.619	0.731	0.379
OCTOBER	0.024	0.257	0.377	0.184	0.307	0.493	0.053	0.232	0.771	0.266
NOVEMBER	0.030	0.319	0.467	0.228	0.381	0.611	0.066	0.288	0.956	0.330
DECEMBER	2.630	0.239	0.011	0.225	2.320	0.487	2.160	0.102	1.630	2.010

Supplementary table S32. Organic matter amounts obtained from SSM samples from 10 stations in Lake Bafa throughout the year (g L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	0.0021	0.0011	0.0035	0.0003	0.0013	0.0008	0.0011	0.0032	0.0052	0.0030
FEBRUARY	0.0040	0.0063	0.0025	0.0058	0.0027	0.0033	0.0074	0.0104	0.0145	0.0022
MARCH	0.0059	0.0089	0.0019	0.0077	0.0014	0.0026	0.0240	0.0154	0.0026	0.0024
APRIL	0.0045	0.0053	0.0034	0.0033	0.0006	0.0070	0.0126	0.0053	0.0088	0.0013
MAY	0.0037	0.0051	0.0025	0.0035	0.0028	0.0029	0.0098	0.0069	0.0068	0.0019
JUNE	0.0064	0.0173	0.0040	0.0034	0.0016	0.0096	0.0306	0.0149	0.0067	0.0053
JULY	0.0040	0.0044	0.0030	0.0024	0.0012	0.0107	0.0309	0.0129	0.0040	0.0022
AUGUST	0.0011	0.0023	0.0009	0.0015	0.0007	0.0019	0.0014	0.0017	0.0010	0.0012
SEPTEMBER	0.0021	0.0034	0.0028	0.0082	0.0039	0.0034	0.0035	0.0023	0.0058	0.0047
OCTOBER	0.0031	0.0045	0.0047	0.0149	0.0071	0.0050	0.0055	0.0029	0.0107	0.0083
NOVEMBER	0.0033	0.0064	0.0031	0.0061	0.0029	0.0061	0.0144	0.0069	0.0056	0.0043
DECEMBER	0.0022	0.0038	0.0010	0.0002	0.0079	0.0008	0.0036	0.0005	0.0028	0.0005

Supplementary table S33. Inorganic matter amounts obtained from SSM samples from 10 stations in Lake Bafa throughout the year (g L⁻¹).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	0.0050	0.0015	0.0052	0.0024	0.0024	0.0039	0.0067	0.0040	0.0037	0.0066
FEBRUARY	0.0040	0.0170	0.0002	0.0082	0.0002	0.0002	0.0062	0.0030	0.0044	0.0038
MARCH	0.0063	0.0247	0.0040	0.0063	0.0024	0.0096	0.0175	0.0081	0.0184	0.0069
APRIL	0.0034	0.0162	0.0004	0.0057	0.0018	0.0008	0.0140	0.0098	0.0047	0.0047
MAY	0.0040	0.0123	0.0021	0.0046	0.0023	0.0030	0.0092	0.0050	0.0066	0.0045
JUNE	0.0013	0.0024	0.0009	0.0006	0.0003	0.0026	0.0091	0.0018	0.0013	0.0006
JULY	0.0021	0.0021	0.0013	0.0010	0.0003	0.0042	0.0108	0.0058	0.0023	0.0016
AUGUST	0.0007	0.0010	0.0004	0.0005	0.0003	0.0008	0.0006	0.0009	0.0005	0.0007
SEPTEMBER	0.0022	0.0031	0.0027	0.0041	0.0015	0.0015	0.0028	0.0020	0.0047	0.0050
OCTOBER	0.0037	0.0052	0.0050	0.0077	0.0027	0.0021	0.0050	0.0030	0.0089	0.0093
NOVEMBER	0.0020	0.0027	0.0020	0.0028	0.0010	0.0022	0.0057	0.0027	0.0036	0.0035
DECEMBER	0.0014	0.0023	0.0006	0.0001	0.0048	0.0004	0.0015	0.0002	0.0017	0.0003

Supplementary table S34. Organic matter amounts obtained from 10 stations in Lake Bafa throughout the year (%).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	29.58	42.31	40.23	11.11	35.14	17.02	14.10	44.44	58.43	31.25
FEBRUARY	50.00	27.04	92.59	41.43	93.10	94.29	54.41	77.61	76.72	36.67
MARCH	48.50	26.50	32.10	54.80	36.90	21.40	57.80	65.40	12.40	25.60
APRIL	56.90	24.50	89.60	36.50	24.10	89.65	47.40	35.20	65.40	21.40
MAY	48.30	29.18	54.33	43.16	54.37	49.45	51.50	58.01	50.85	29.54
JUNE	83.00	88.00	82.00	84.00	86.00	79.00	77.00	89.00	84.00	89.00
JULY	65.00	68.00	69.00	71.00	77.00	72.00	74.00	69.00	63.00	59.00
AUGUST	62.00	71.00	73.00	75.00	74.00	71.00	69.00	65.00	64.00	62.00
SEPTEMBER	49.19	52.72	51.40	66.55	72.64	70.20	55.22	53.55	55.26	48.37
OCTOBER	45.80	46.50	48.50	65.80	72.50	69.90	52.60	48.50	54.59	46.90
NOVEMBER	62.55	70.10	60.18	68.47	74.27	73.41	71.67	71.84	61.33	55.56
DECEMBER	62.00	63.00	65.00	68.00	62.00	69.00	71.00	65.00	63.00	62.00

Supplementary table S35. Inorganic matter amounts obtained from 10 stations in Lake Bafa throughout the year (%).

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 9	Station 10
JANUARY	70.42	57.69	59.77	88.89	64.86	82.98	85.90	55.56	41.57	68.75
FEBRUARY	50.00	72.96	7.41	58.57	6.90	5.71	45.59	22.39	23.28	63.33
MARCH	51.50	73.50	67.90	45.20	63.10	78.60	42.20	34.60	87.60	74.40
APRIL	43.10	75.50	10.40	63.50	75.90	10.35	52.60	64.80	34.60	78.60
MAY	51.70	70.82	45.67	56.84	45.63	50.55	48.50	41.99	49.15	70.46
JUNE	17.00	12.00	18.00	16.00	14.00	21.00	23.00	11.00	16.00	11.00
JULY	35.00	32.00	31.00	29.00	23.00	28.00	26.00	31.00	37.00	41.00
AUGUST	38.00	29.00	27.00	25.00	26.00	29.00	31.00	35.00	36.00	38.00
SEPTEMBER	50.81	47.28	48.60	33.45	27.36	29.80	44.78	46.45	44.74	51.63
OCTOBER	54.20	53.50	51.50	34.20	27.50	30.10	47.40	51.50	45.41	53.10
NOVEMBER	37.45	29.90	39.82	31.53	25.73	26.59	28.33	28.16	38.67	44.44
DECEMBER	38.00	37.00	35.00	32.00	38.00	31.00	29.00	35.00	37.00	38.00