SPATIAL-TEMPORAL VARIABILITY AND PROBABILISTIC HEALTH RISK ASSESSMENT OF FLUORIDE FROM LENTIC ECOSYSTEM, TURKEY

Supplementary material
Table lists

Table S1 List of input variables for assessment of public health risk of fluoride through oral intake.

Parameters	Units	Distribution type	Values				Reference
			Infants	Children	Teens	Adults	
Floride level	mg/l	Triangular	Wet season (Avg: 0.288, Min: 0.01, Max: 0.74 Dry season (Avg: 0.366, Min: 0.02, Max: 0.64)				
Daily intake rate (C_d)	L/day	Normal [arithmetic mean]	0.08	0.85	2	2.5	Zhang et al. (2017)
Exposure frequency (EF)	day/year	Fixed value	365	365	365	365	
Exposure duration (ED)	year	Fixed value	6	6	6	6	MEPRC (2014)
Averaging time (AT)	days	Fixed value	2190	2190	2190	9125	MEPRC (2014)
Body weight (BW)	kg	Lognormal [geometric mean]	10	15	50	78	Wu et al. (2011)
Oral reference dose (RfDo)	mg/kg/day	Fixed value	0.06	0.06	0.06	0.06	IRIS. 2016

Table S2 Kolmogorov-Smirnov or Shapiro-Wilk's test used for normality of the fluoride datasets during the dry and wet seasons

		df	Test Statistic
Dry Season	**Natural lakes**	2	0.260
	Reservoirs/Dam	12	0.176
	Ponds	19	0.154
Wet Season	**Natural lakes**	2	0.260
	Reservoirs/dam	12	0.193
	Ponds	19	0.198

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

d. Significance cannot be computed because sum of case weights is less than 5.

Table S3 Potential human health (risk) effects associated with fluoride ingestions by individuals.

Classes	Fluoride (mg/l)	Effect on human health (WHO 1996)	% of sample	
			Wet season	Dry season
Class-I	<0.5	Conducive to dental caries	87.87	93.93
Class-II	0.5-1.5	Promotes development of strong bones and teeth	12.12	6.06
Class-III	1.5-4	Dental fluorosis (mottling of teeth)	0.0	0.00

List of Figure

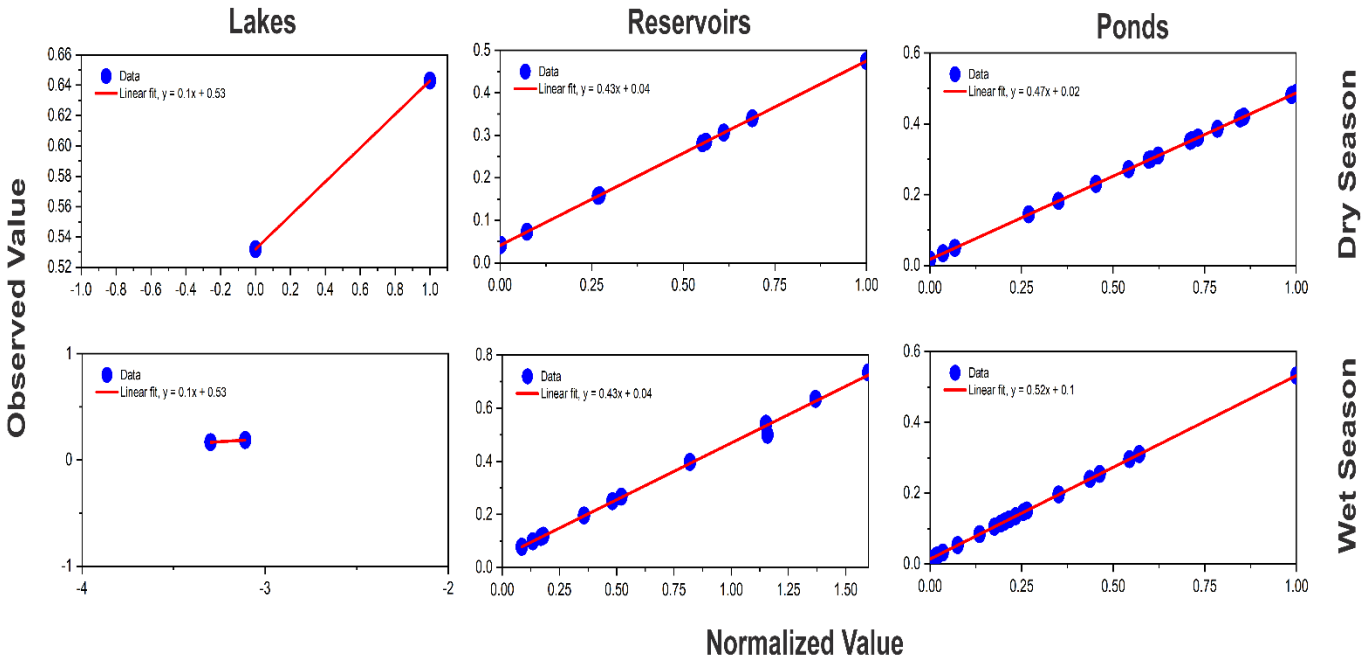

Figure S1. Normality plots of R-squared values of fluoride datasets during the dry and wet seasons in the Thrace Region (Turkey).