

Supplementary Materials

Table S1. Geographical locations of the meteorological stations from which data were obtained for this study

Station	Latitude (°)	Longitude (°)	Elevation (m asl)
Urmia	37.65	45.05	1328.0
Saqez	36.22	46.31	1522.8

Table S2. Wind clustering during the day and night at Urmia meteorological station in summer

Hours	Wind Direction	The cluster of wind direction
Day time (06:00, 09:00, 12:00, and 15:00 h)	Northeast (Angle: 22.5 to 67.5) East (Angle: 67.5 and 112.5) Southeast (Angle: 112.5 to 157.5)	Lake breeze
	North (Angle: 337.5 to 22.5) South (Angle: 157.5 to 202.5) Southwest (Angle: 202.5 to 247.5) West (Angle: 247.5 to 292.5) Northwest (Angle: 292.5 to 337)	Other directions
Night-time (00:00, 03:00, 18:00, and 21:00 h)	Southwest (Angle: 202.5 to 247.5) West (Angle: 247.5 to 292.5) Northwest (Angle: 292.5 to 337)	Land breeze
	North (Angle: 337.5 to 22.5) Northeast (Angle: 22.5 to 67.5) East (Angle: 67.5 to 112.5) Southeast (Angle: 112.5 to 157.5) South (Angle: 157.5 to 202.5)	Other directions

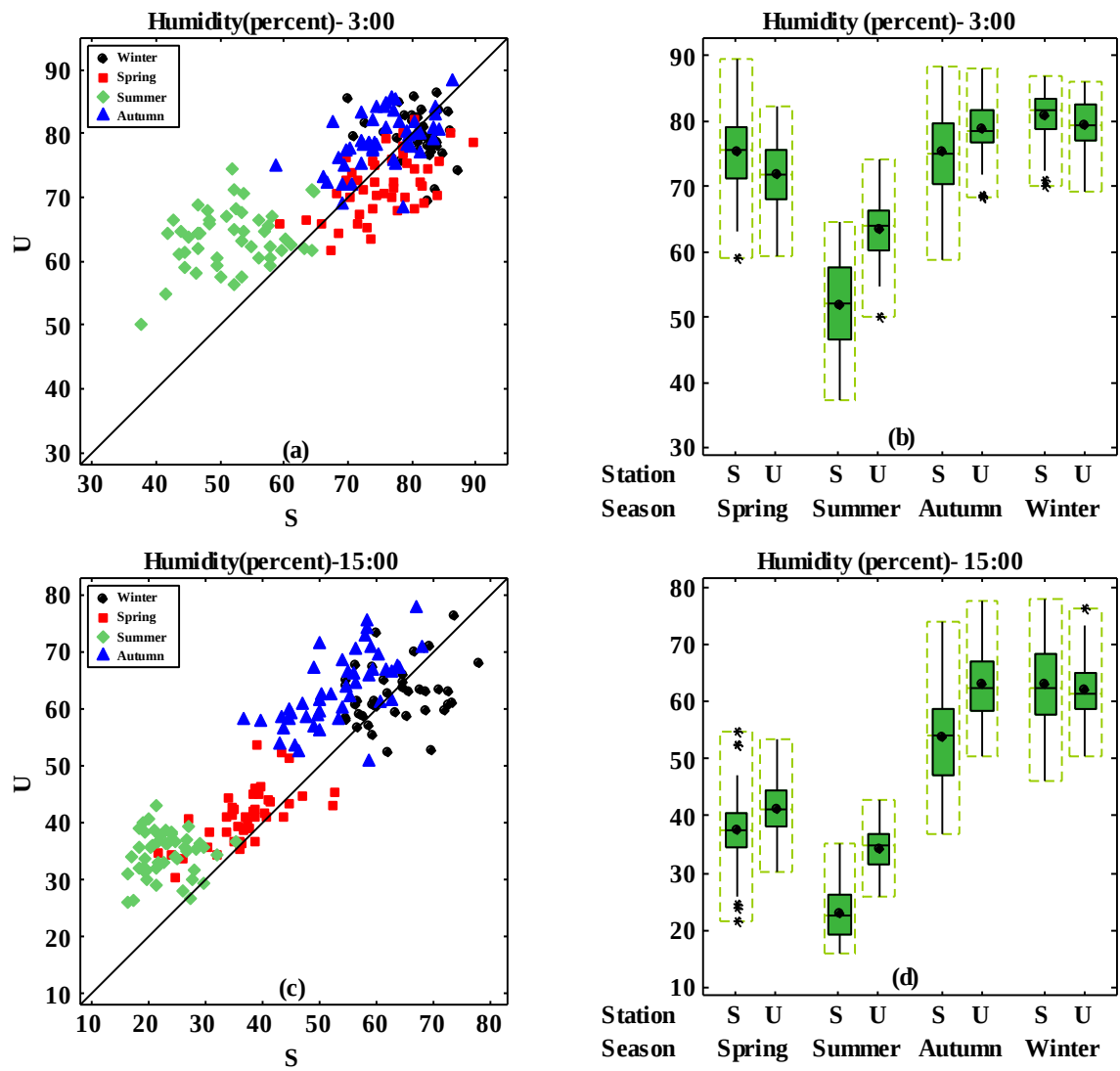


Figure S1. Seasonal patterns in relative humidity. Scatter plots of relative humidity at a) 03:00 h and c) 15.00 h in the different seasons at Urmia station (U) and Sazez station (S). b, d) The corresponding boxplots.

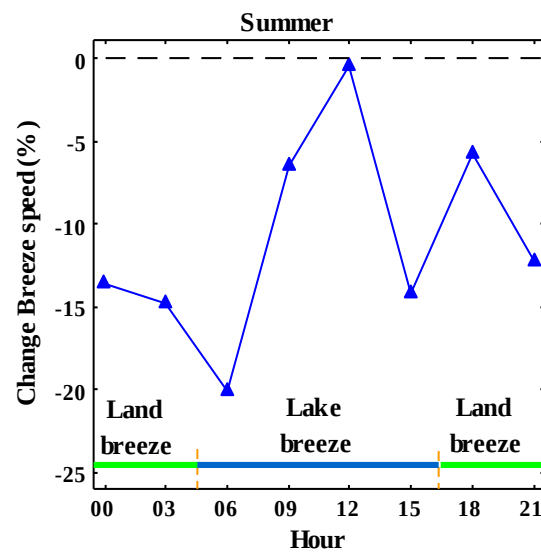


Figure S2. Changes in the hourly speed of local lake and land breezes at Urmia meteorological station in the periods with normal and low lake level.

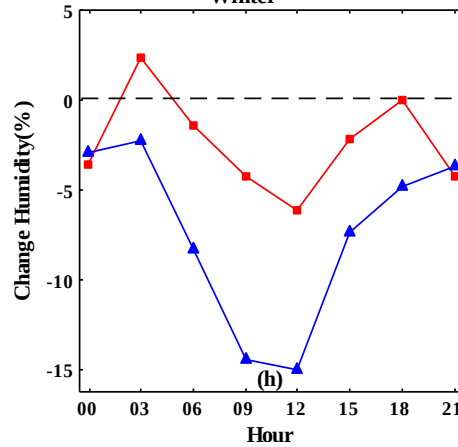
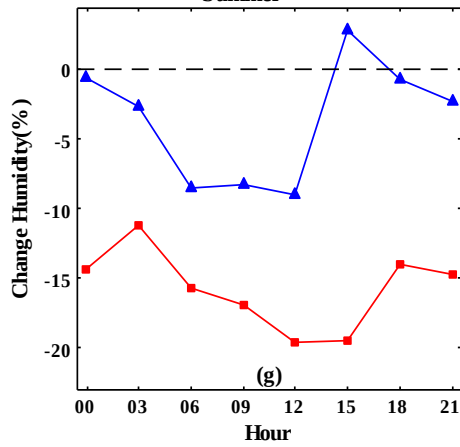
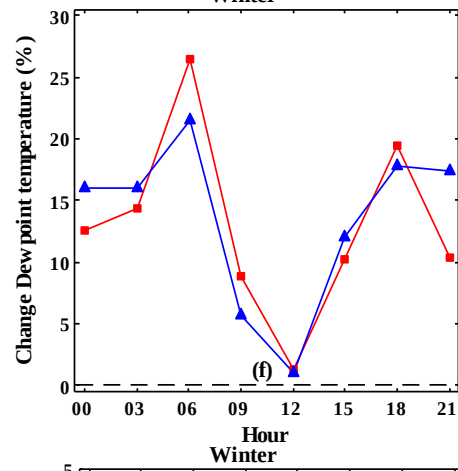
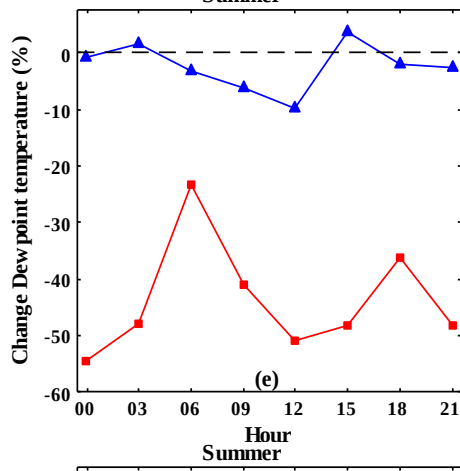
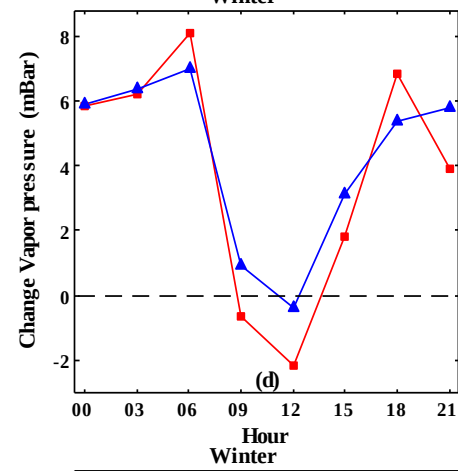
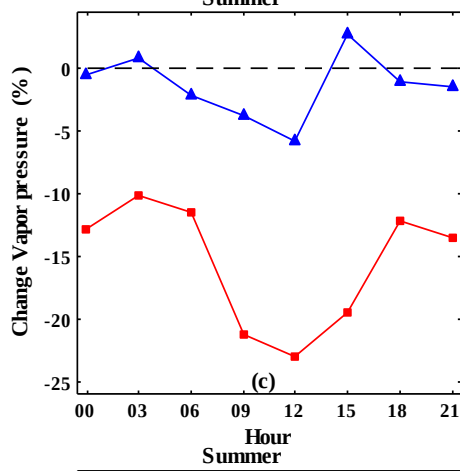
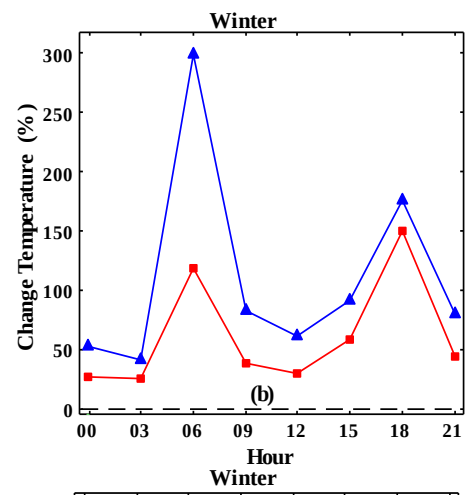
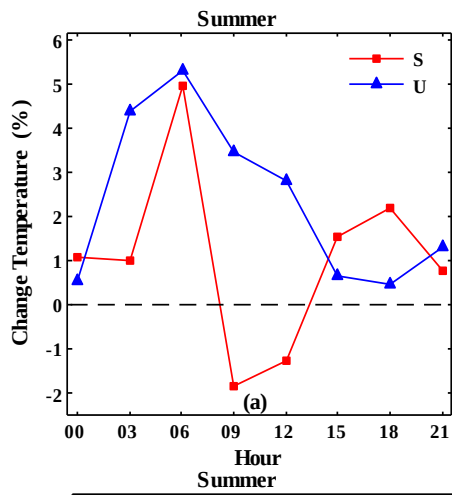


Figure S3. Changes in hourly climate parameters at Urmia (U) and Saez (S) meteorological stations in low water level in Lake Urmia period compare to normal water level. a) Temperature in summer, b) temperature in winter, c) vapor pressure in summer, d) vapor pressure in winter, e) dewpoint temperature in summer, f) dewpoint temperature in winter, g) relative humidity in summer, and h) relative humidity in winter