

Supplementary Materials

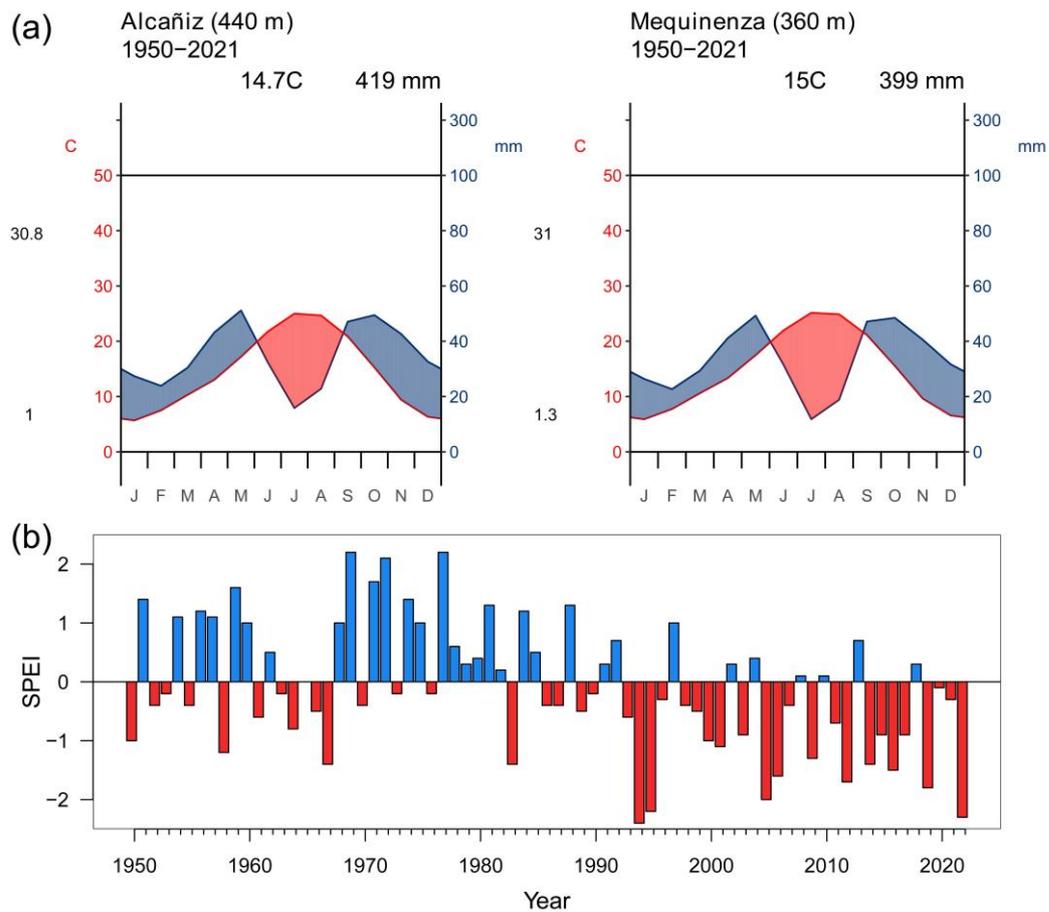


Figure S1. (a) Climate diagrams for the study sites for the 1950–2021 period based on TerraClimate dataset [35]. (b) Standardized Precipitation Evapotranspiration Index (SPEI) of July calculated at 9-month long-scale.

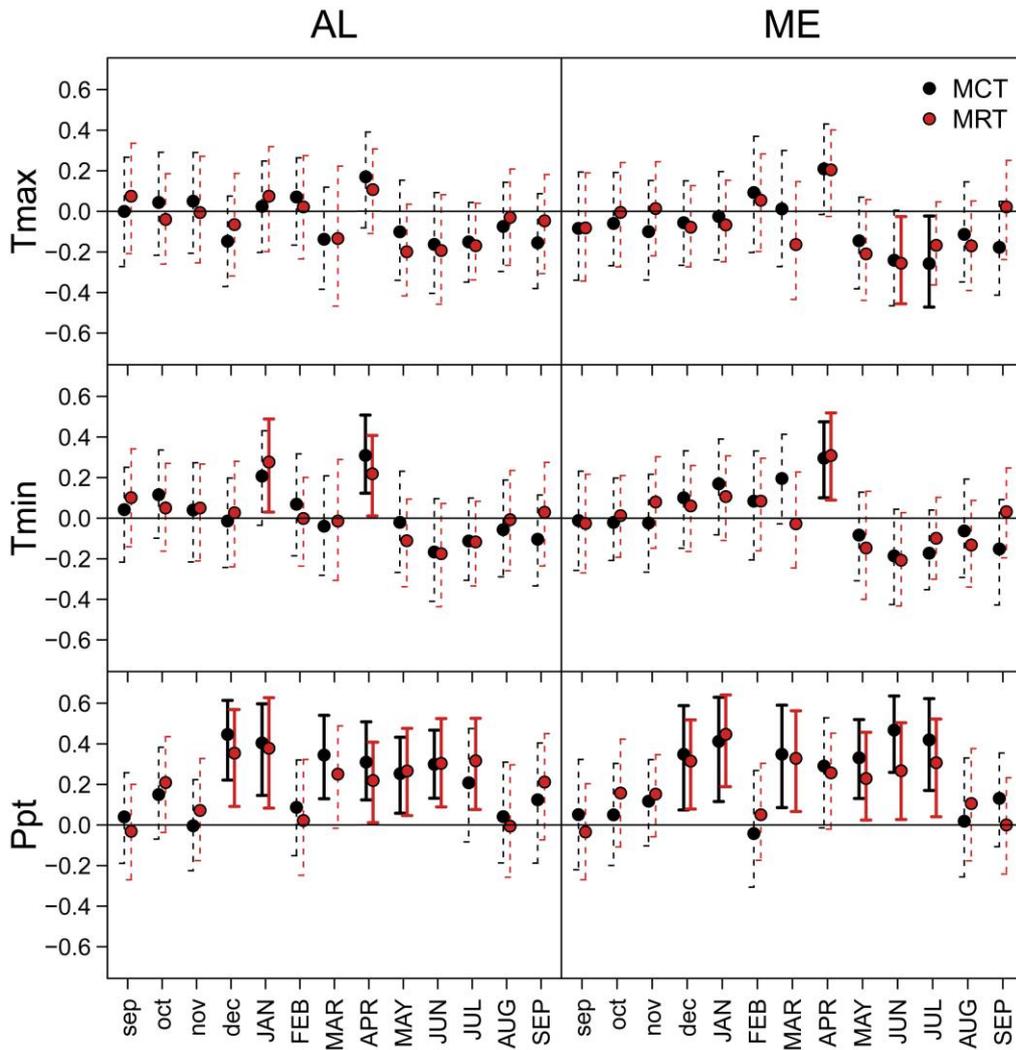
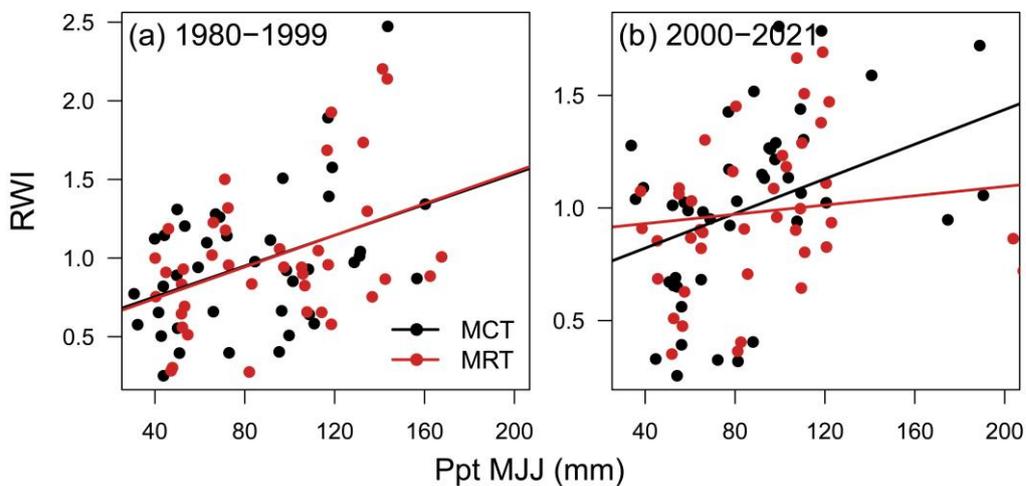


Figure S2. Bootstrapped correlation coefficients between RWI and monthly maximum temperature (Tmax), minimum temperature (Tmin), and total precipitation (Ppt) in Aleppo pine during the period 1950–2021. Error bars are 95% confidence intervals, and significant and non-significant effects are represented by solid and dashed lines, respectively. Months indicated in lowercase and uppercase letters on the x-axis represent the year prior to ring formation to the current year of tree ring formation, respectively.



**Figure S3.** Relationships between RWI and the sum of May, June and July precipitation for (a) the period 1980–1999, and (b) the period 2000–2021.