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## Supplementary Material to the paper

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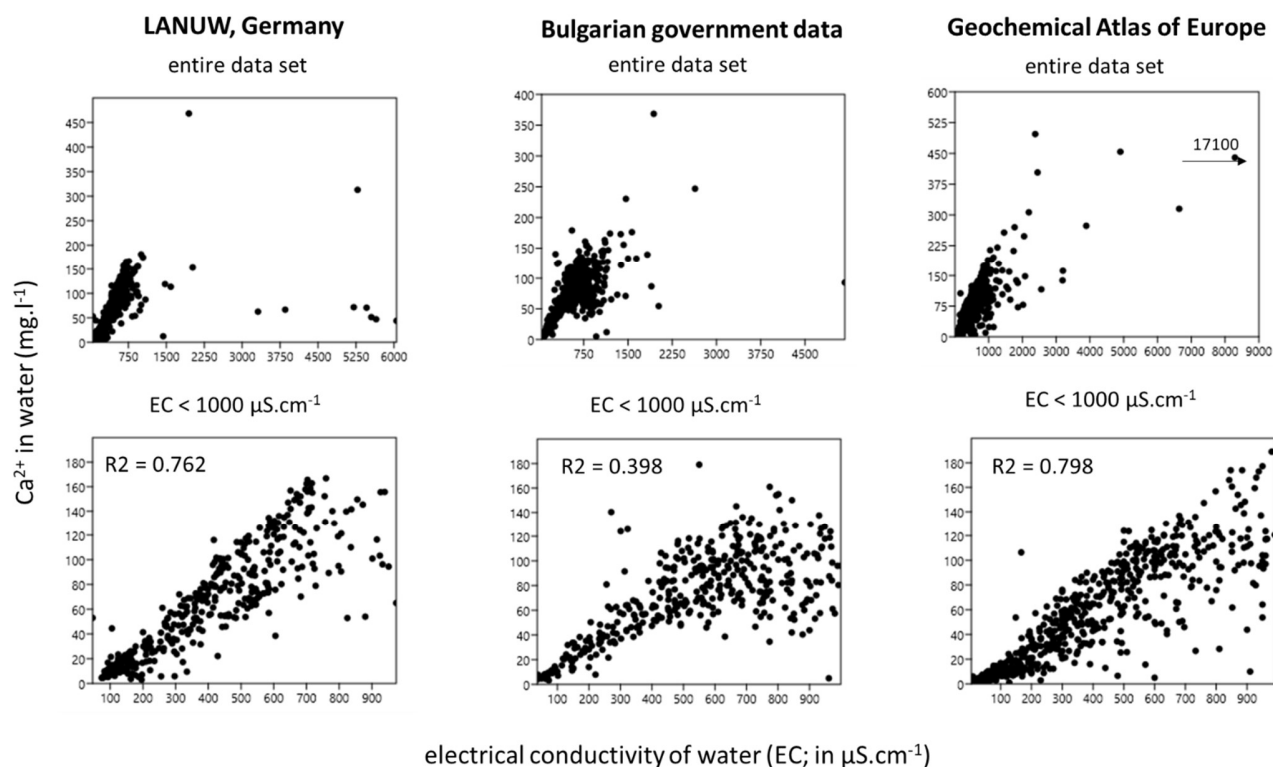
### Hájek M. et al., A European map of groundwater pH and calcium

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828 **Supplementary Figure 1:** The relationship between water electrical conductivity of water (EC; in  
829  $\mu\text{S}\cdot\text{cm}^{-1}$ ) and concentration of  $\text{Ca}^{2+}$  in water ( $\text{mg}\cdot\text{l}^{-1}$ ) concentration in the three public data sets.

830 The upper scatters represent the entire data sets, while lower scatters represent the subsets

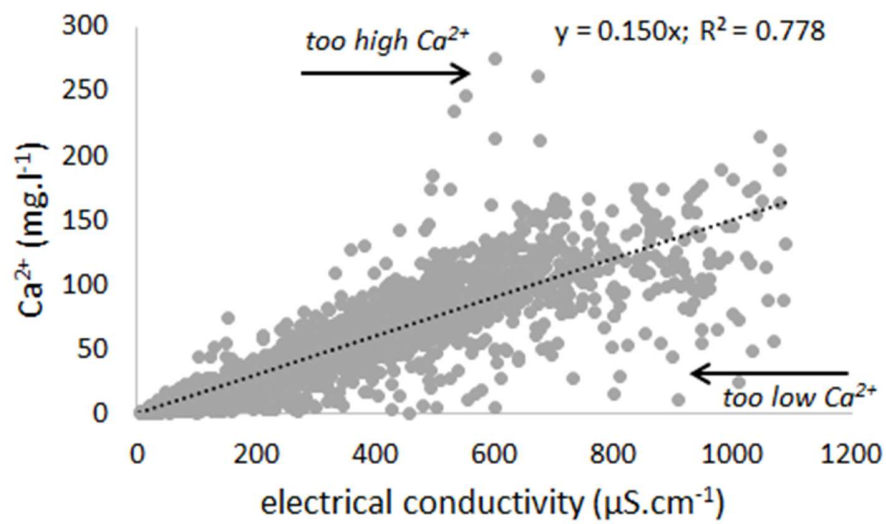
831 restricted by the upper EC limit of  $1,000 \mu\text{S}\cdot\text{cm}^{-1}$ .



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834 **Supplementary Figure 2:** Relationship between electrical conductivity (EC) and measured  $\text{Ca}^{2+}$   
835 concentration when the upper limit of EC ( $1,000 \mu\text{S}\cdot\text{cm}^{-1}$ ) was adopted ( $n = 2,319$ ).

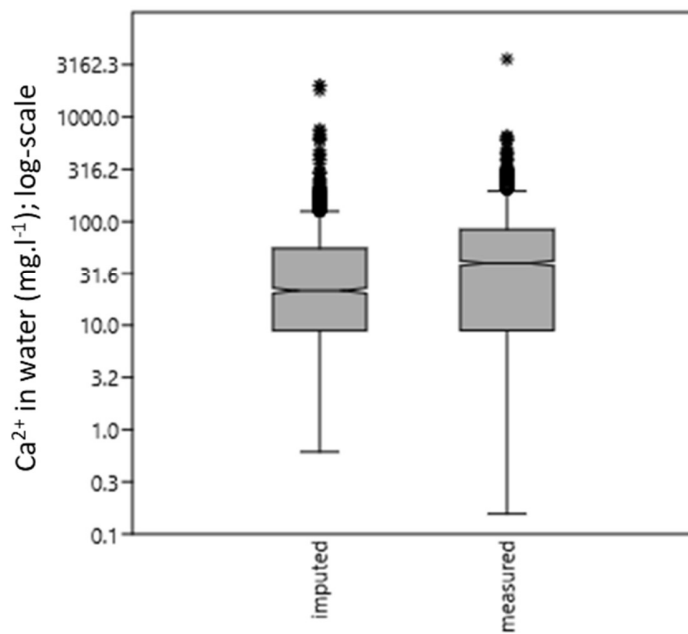


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838 **Supplementary Figure 3:** Box-and-whisker plots showing the distribution of measured and  
839 imputed  $\text{Ca}^{2+}$  values (log-scale). Graph shows the lower and upper quartiles, non-outlier maxima  
840 and minima, and outliers.

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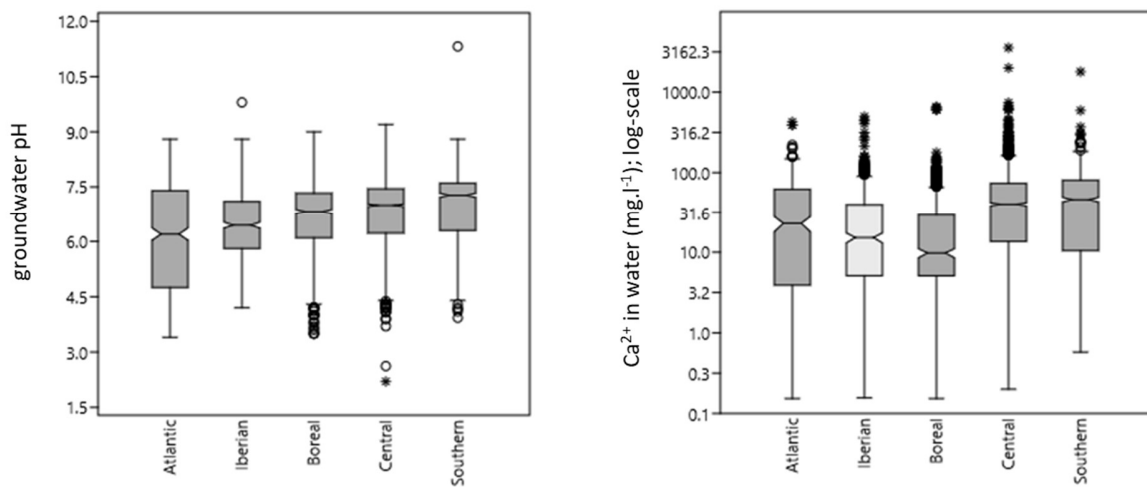


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844 **Supplementary Figure 4:** Box-and-whisker plots showing the distribution of pH and Ca<sup>2+</sup> (log-  
 845 scale, including imputed values) across Europe. European continent was arbitrarily divided into  
 846 the five regions based on longitude and latitude: Atlantic (< 5° E, > 45° N; n = 621 for pH and  
 847 345 for Ca<sup>2+</sup>, respectively); Iberian (< 5° E, < 45° N; n = 642, 640); Boreal (> 5° E, > 55° N; n =  
 848 1128, 925); Central (> 5° E, = 44–55° N; n = 2796, 2762) and Southern (> 5° E, < 45° N; n = 1272,  
 849 1255). Graph shows the lower and upper quartiles, non-outlier maxima and minima, and  
 850 outliers.

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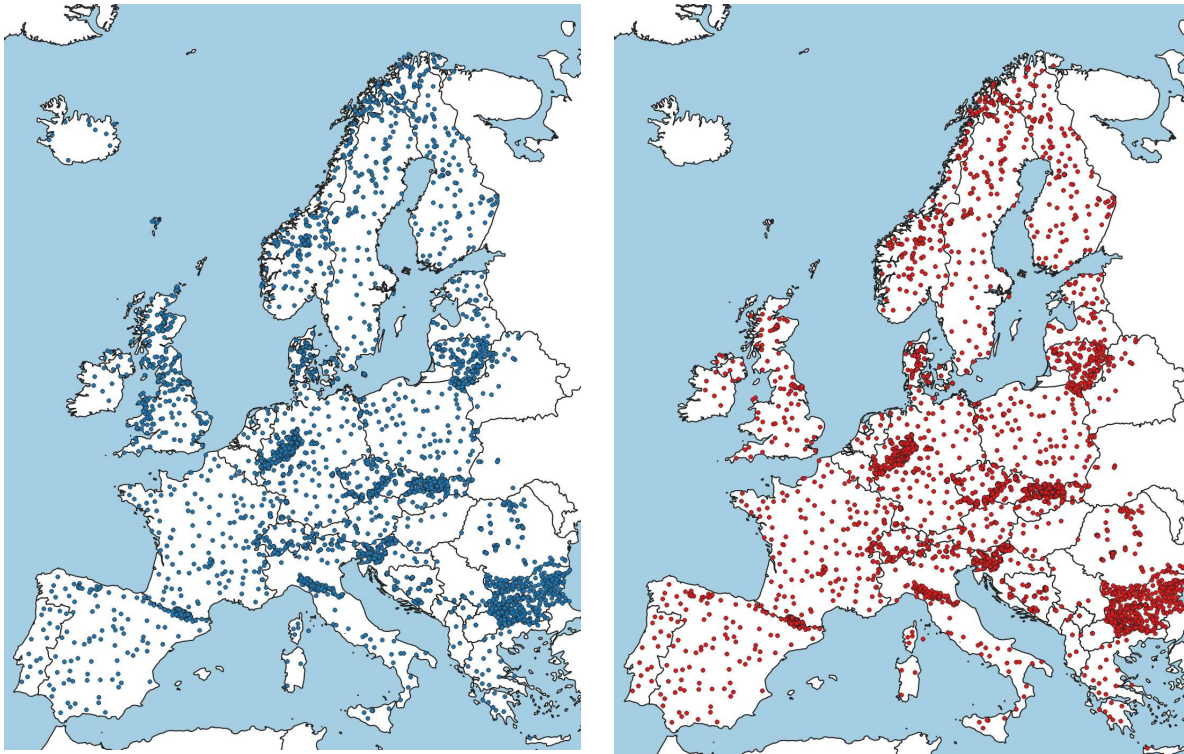


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855 **Supplementary Figure 5.** Spatial distribution of the calibration data, presented separately for  
856 groundwater pH (left) and Ca<sup>2+</sup> (right).



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