

Supporting Information

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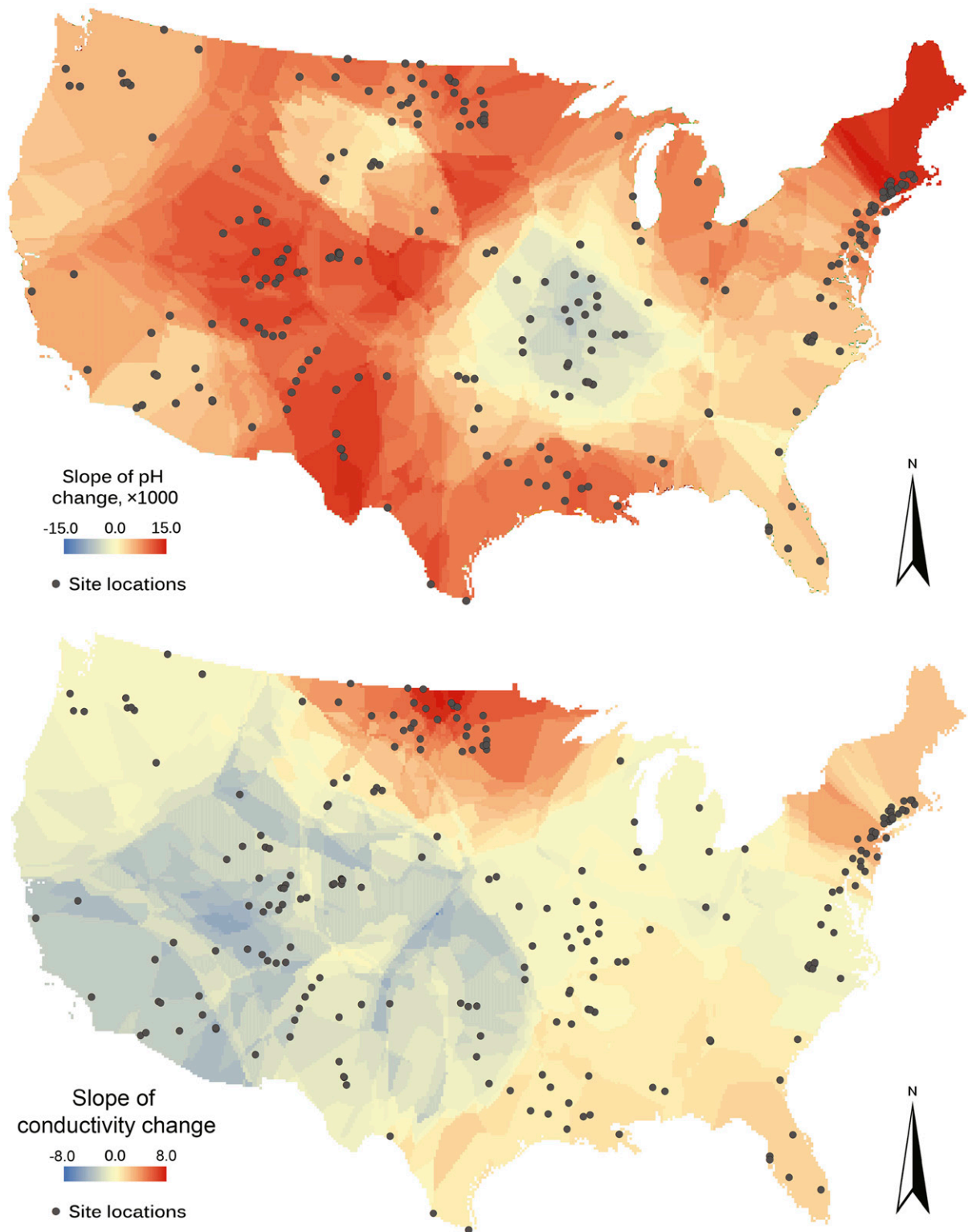


Fig. S1. Distribution of Theil–Sen slopes of changing pH over time as inferred from the geographic interpolation (*Top*). Distribution of Theil–Sen slopes of changing specific conductance over time as inferred from the geographic interpolation (*Bottom*). We applied an interpolation and precipitation-weighting procedure to determine the total drainage area and amount of surface water subjected to either decreasing or increasing slopes at the continental scale. First, the estimated slope of all areas within the continental United States was determined using kriging to interpolate within the 233 analyzed sites to generate a raster of Theil–Sen slope values for the entire continental United States at a 10 km² resolution. Values are precipitation weighted.

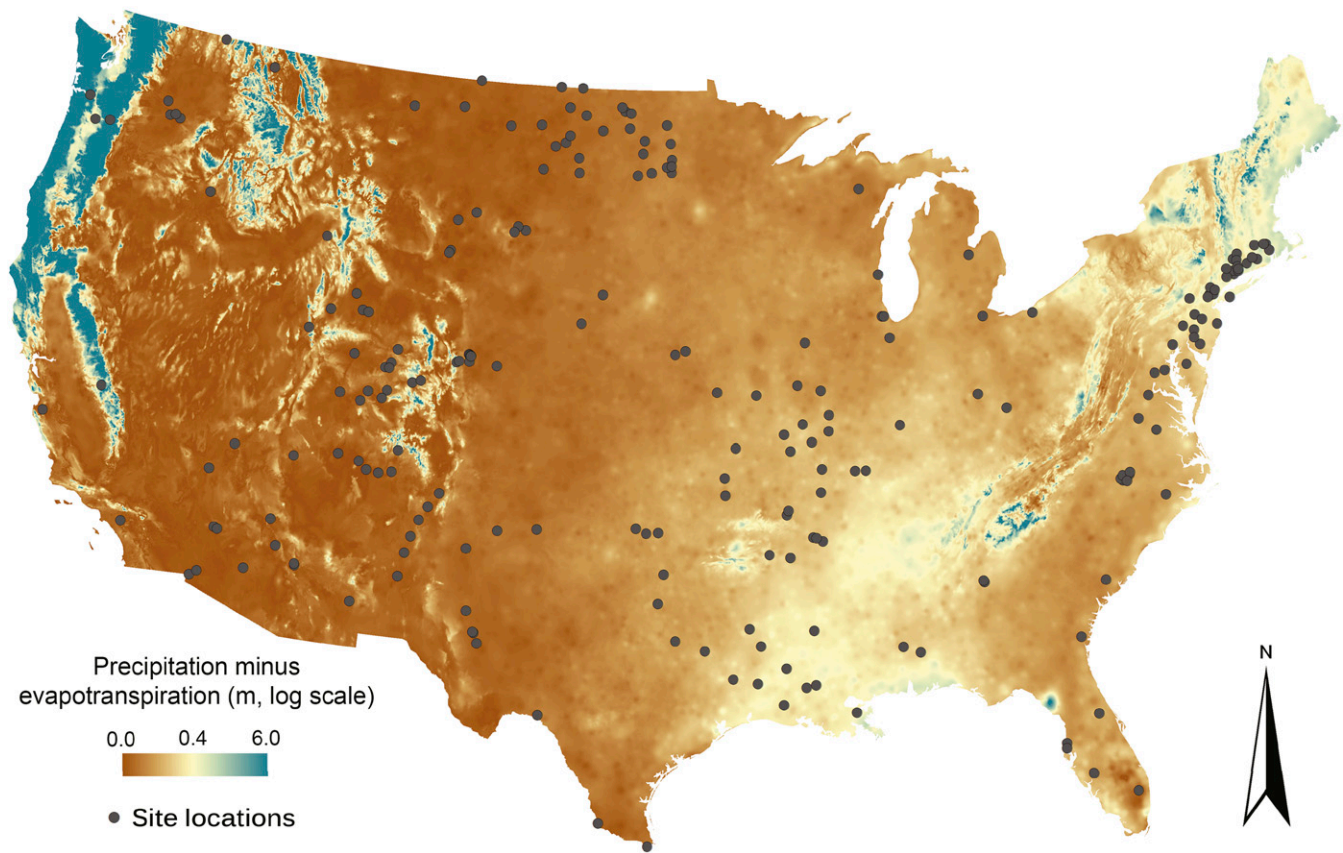


Fig. 52. The volume of water for every 1 km² pixel in the same area by subtracting the estimated total mean annual evapotranspiration (66) from mean annual precipitation (67). The two rasters were merged to a common spatial scale (10 km²), which allowed for subsequent calculation of the total amount of water that becomes groundwater and surface runoff subjected to increasing or decreasing alkalization. Increasing slope values amount by land for pH (92%) and conductivity (36.9%). Increasing slope values amount by precipitation runoff (ground water and surface runoff) for pH (89.8%) and conductivity (35%).

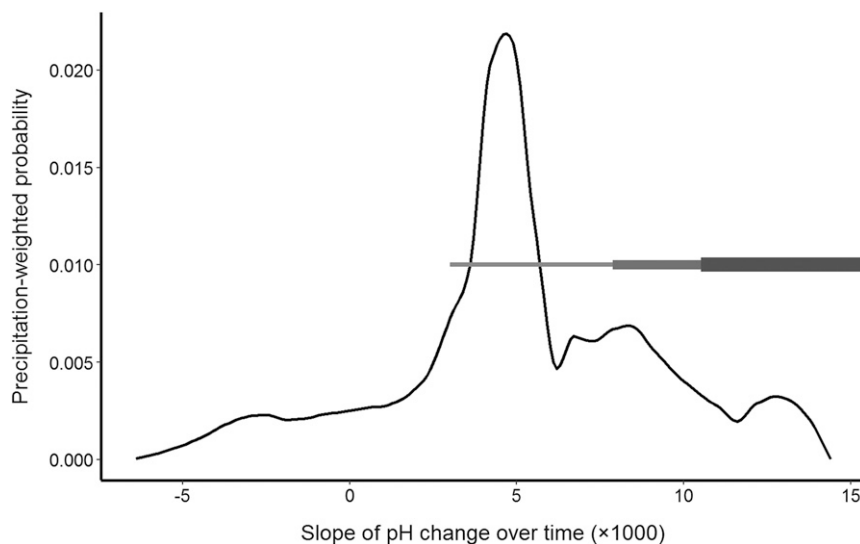


Fig. 53. Distribution of Theil-Sen slopes of changing pH over time as inferred from the geographic interpolation. Values are precipitation weighted. The horizontal bars represent the quartile ranges of slopes that were statistically significant and above zero.

Other Supporting Information Files

[Dataset S1 \(XLSX\)](#)