Supplement of Hydrol. Earth Syst. Sci., 29, 4791–4810, 2025
https://doi.org/10.5194/hess-29-4791-2025-supplement
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Hydrology and Earth System Sciences
Open Access
EGU

Supplement of

Characterizing precipitation and soil moisture drydowns in Finland using SMAP satellite data

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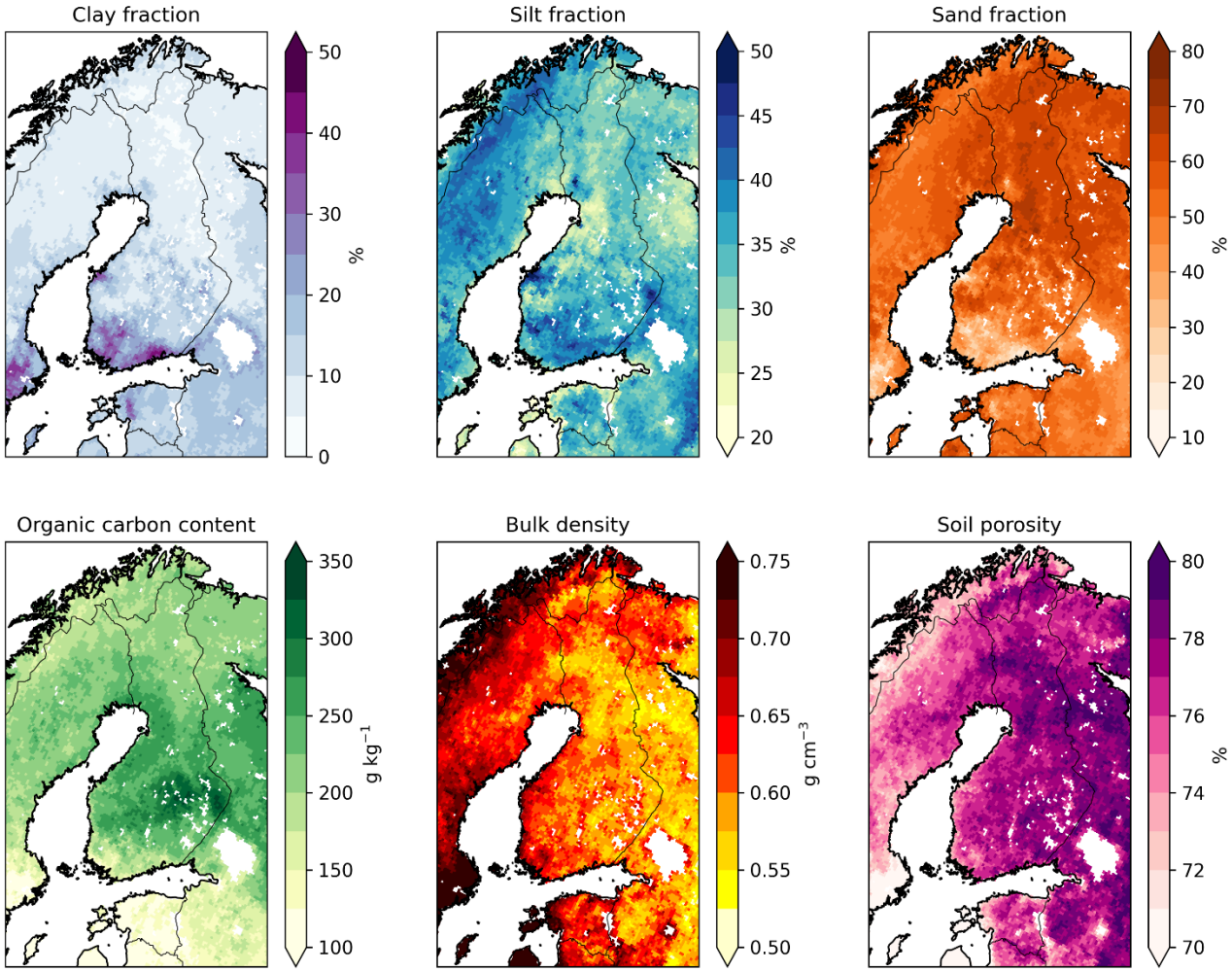

Figure S1. Spatial distribution of soil properties, including clay fraction, silt fraction, sand fraction, organic carbon content, bulk density, and soil porosity.

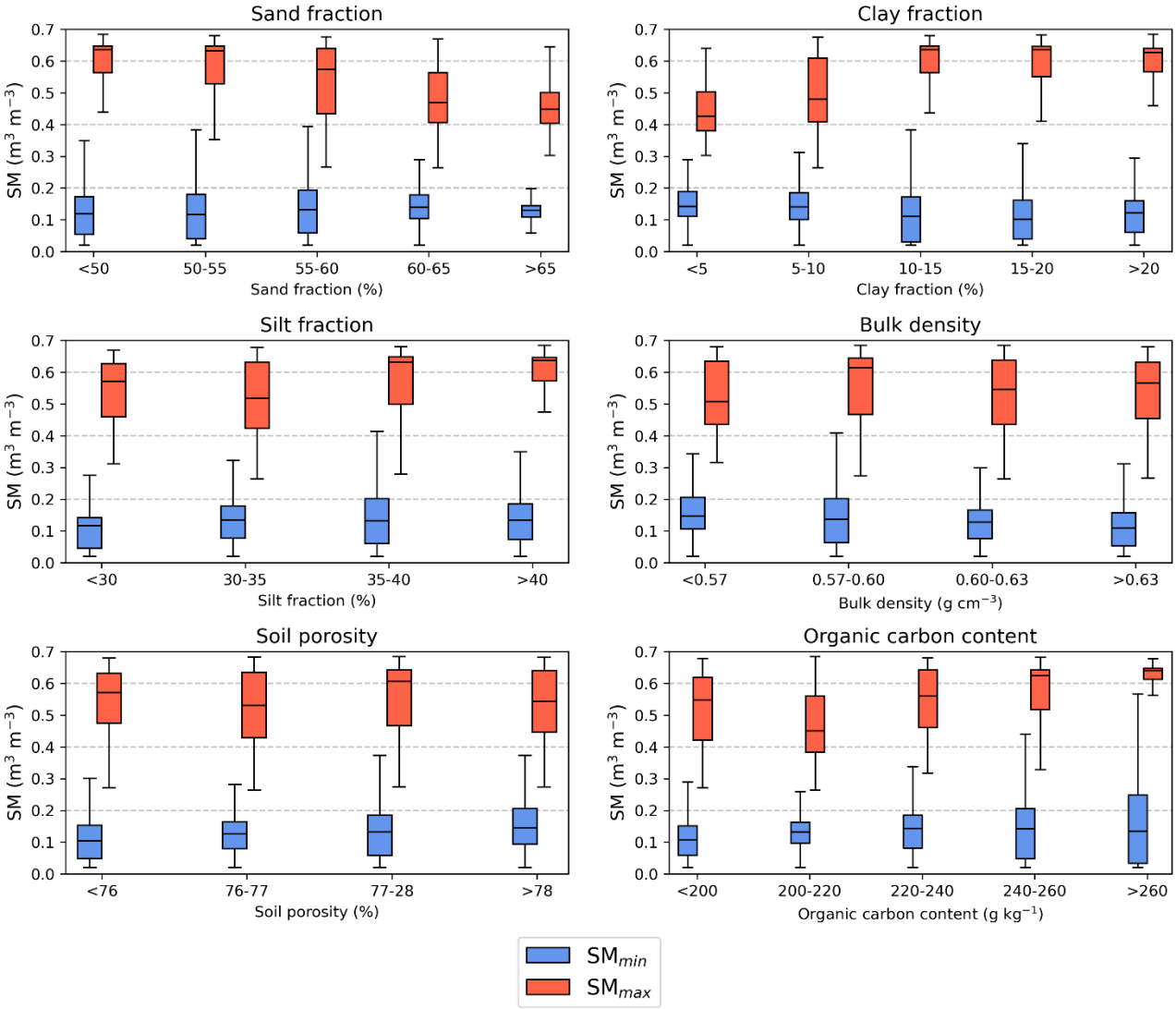

Figure S2. Box plots showing variation of observed SM_{min} and SM_{max} with sand fraction, clay fraction, silt fraction, bulk density, soil porosity and organic carbon content.

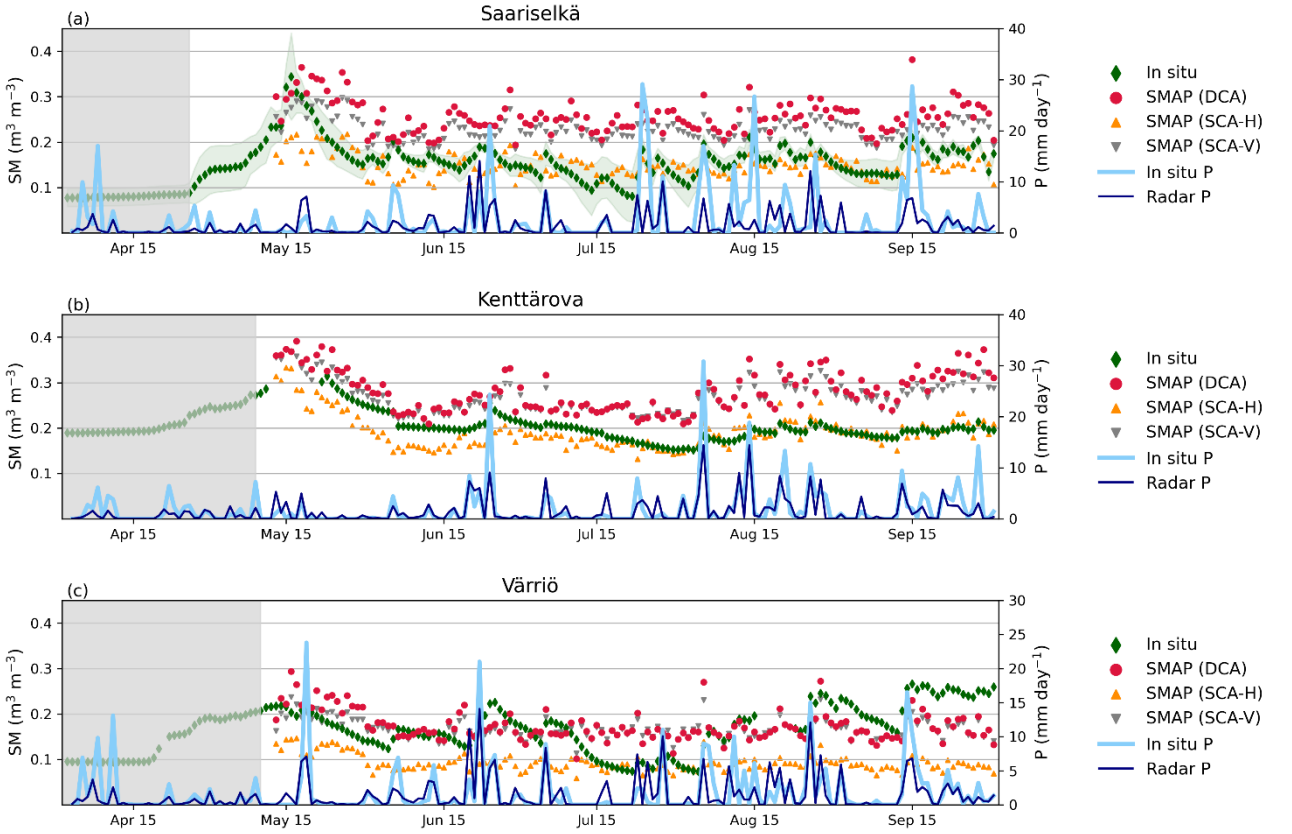

Figure S3. Timeseries of SM and radar-based P measurements in Saariselkä, Kenttärova, and Värriö. The green shaded area indicates the standard deviation of the averaged SM measurements in Saariselkä, and the grey shaded area indicates the days when the soil temperature is below 0 °C.

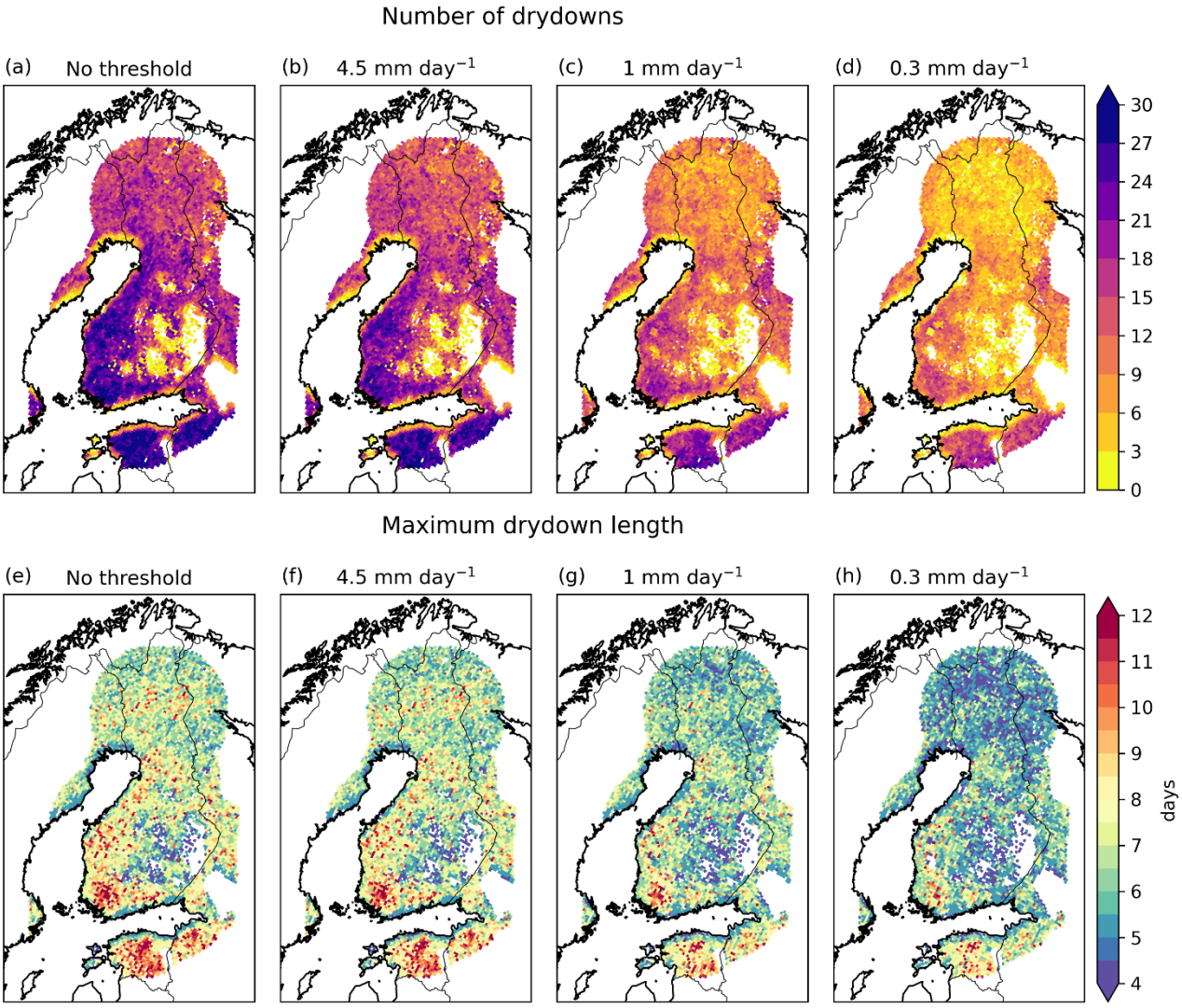

Figure S4. The number of drydowns and the maximum drydown length using different P thresholds when identifying drydowns.

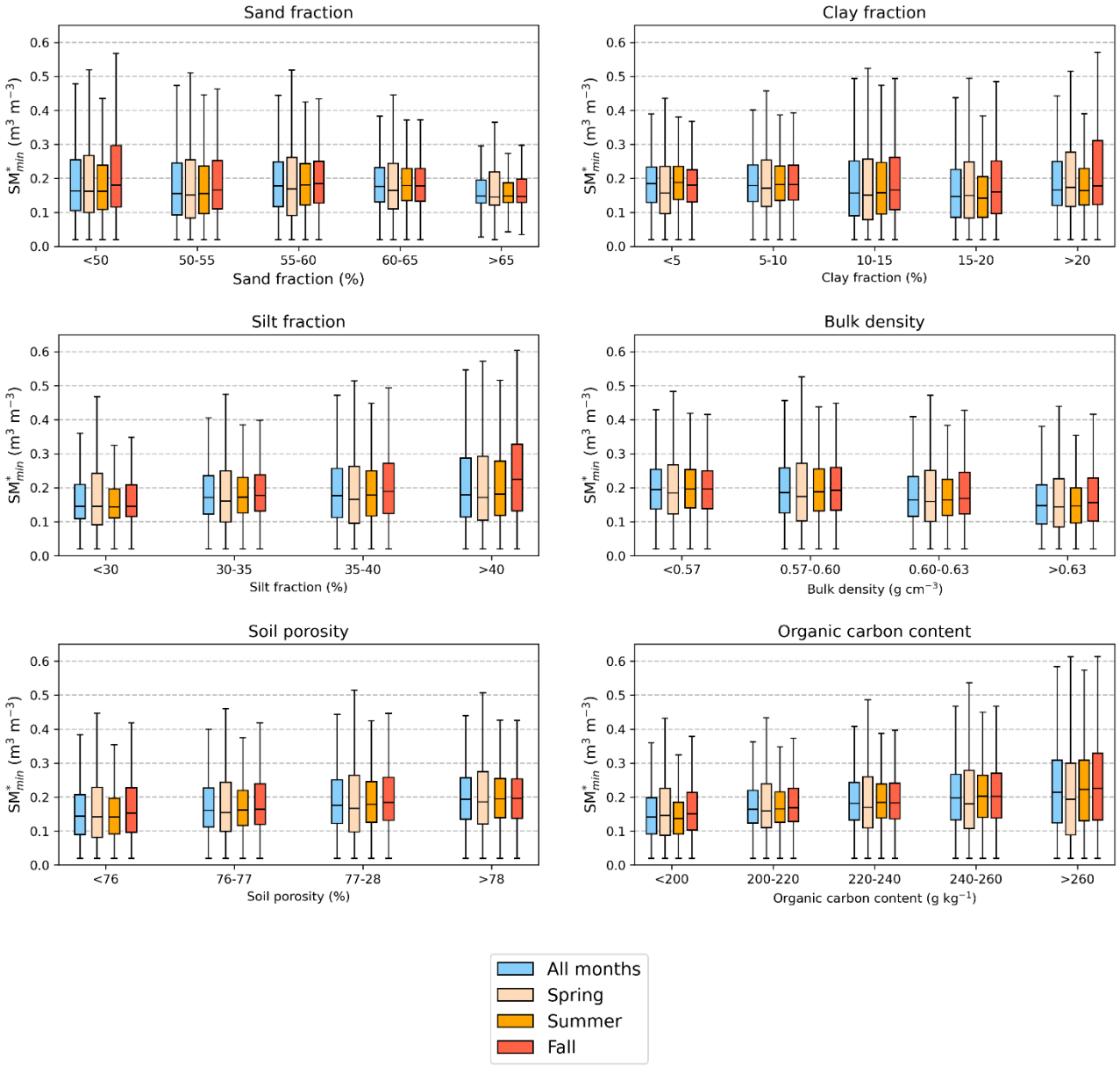

Figure S5. Box plots showing variation of estimated SM*$_{max}$ with sand fraction, clay fraction, silt fraction, bulk density, soil porosity and organic carbon content.

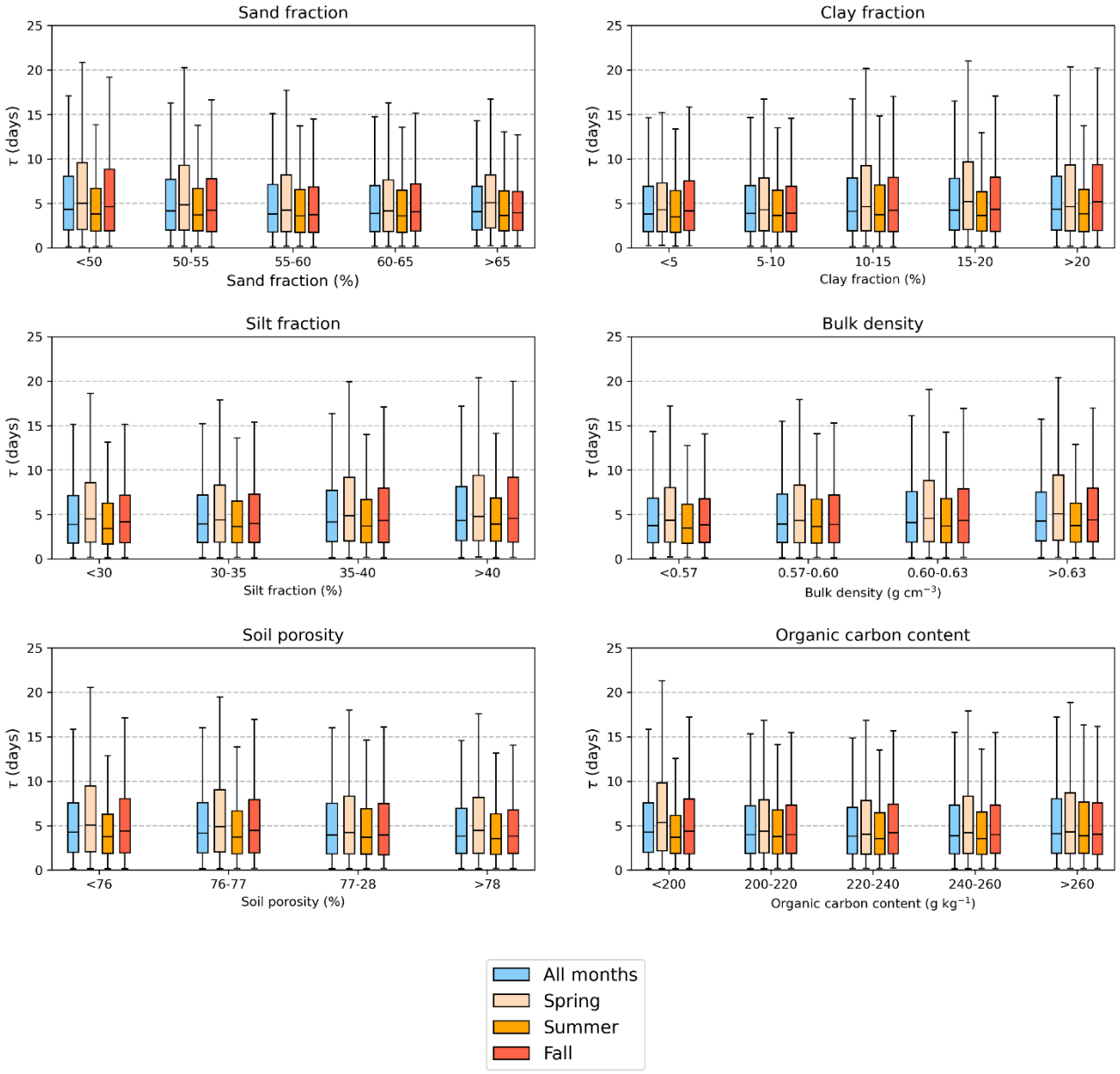

Figure S6. Box plots showing variation of estimated τ with sand fraction, clay fraction, silt fraction, bulk density, soil porosity and organic carbon content.