

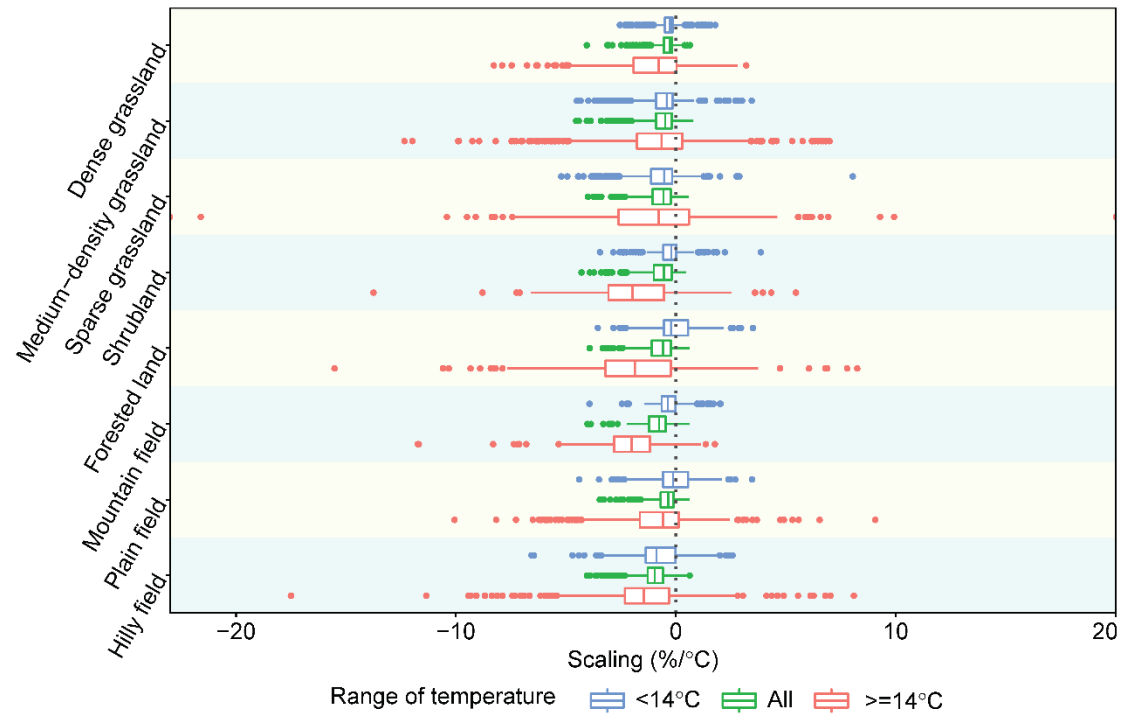


Figure S1. The full boxplot of scalings of SSM with temperature for the 50% quantile regression in the temperature range less than 14 °C (blue), all data (green) and the temperature range more than 14 °C (red), which corresponds to Figures 2 and 3.

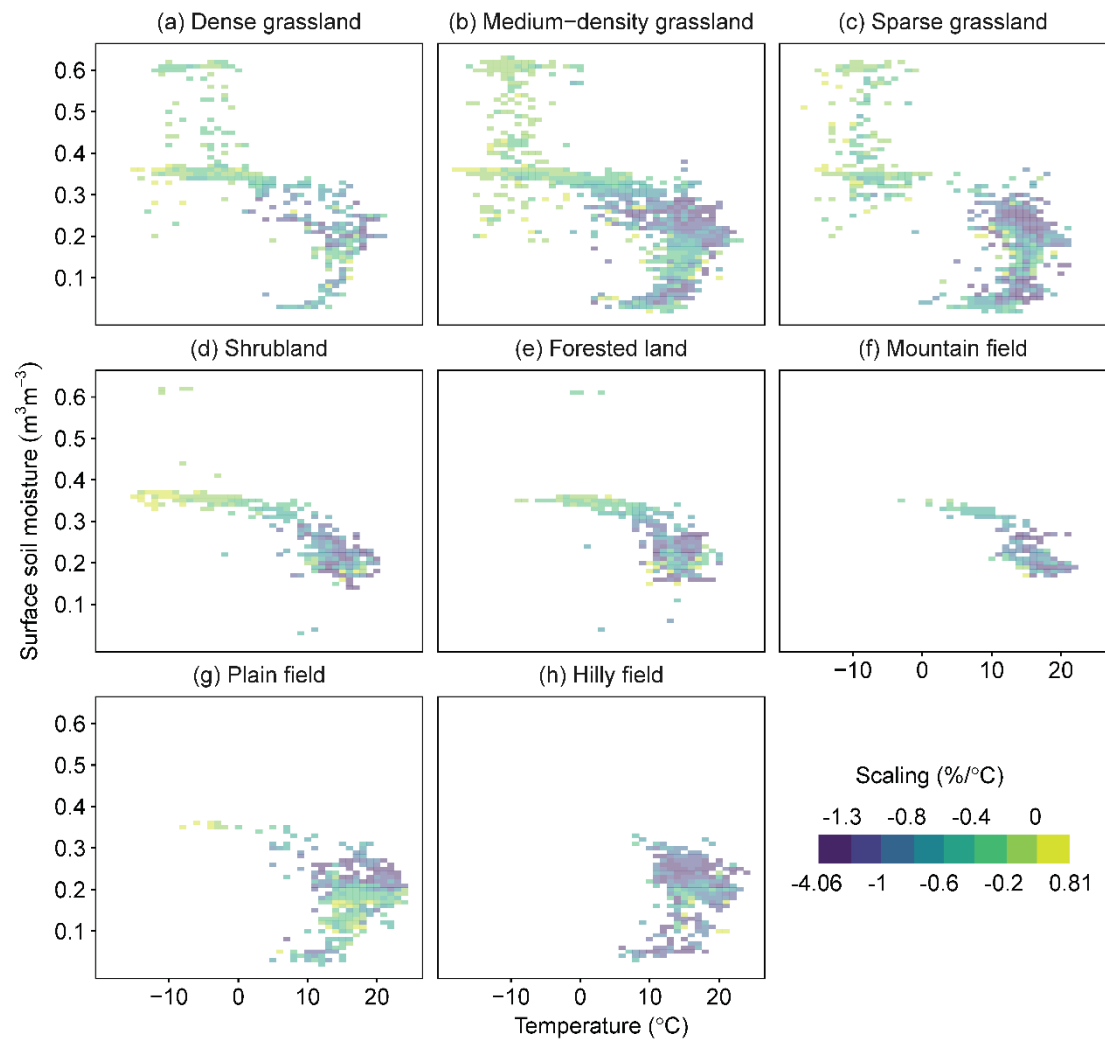


Figure S2. The relationship of scaling with surface soil moisture and temperature. The scaling is averaged for every $0.01 \text{ m}^3\text{m}^{-3}$ interval of surface soil moisture and every 1°C interval of temperature for all spatial grids.