New developments in homogenization efforts for Austria

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Abstract
After providing homogenized daily temperature extremes and precipitation data different methods have been used for finding an appropriate method to detect and if necessary correct breaks in relative humidity. Relative humidity is a widely used parameter in different research areas outside of climatology and meteorology due to its influence on plants and materials. Nevertheless it is a difficult parameter in terms of homogenization, due to its limited range of possible values and even more limited range of occurring values and frequent changes in the instrument. A benchmark dataset was created for different geographical locations in Austria including mountainous regions as well as flat areas. Different methods were applied to these datasets. The results underline the challenges in homogenization and the still necessary efforts to improve in this research area.