



## **Comparison of correction methods of inhomogeneities in daily data on example of Central European temperature and precipitation series**

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Prior any data analysis, data quality control and homogenization have to be undertaken to get rid of erroneous values in time series. In this work we focused especially on comparison of methods for daily data inhomogeneities correction. Two basic approaches for inhomogeneity adjustments were adopted and compared: (i) “delta” method – adjustment of monthly series and projection of estimated smoothed monthly adjustments into annual variation of daily adjustments and (ii) “variable” correction of daily values according to the corresponding percentiles. “Variable” correction methods were investigated more deeply and their results were mutually compared. The methods used were HOM of Paul Della-Marta, SPLIDHOM of Olivier Mestre and a new method of Petr Stepanek. For the calculation, the software ProClimDB has been combined with R software scripts containing HOM and SPLIDHOM and the different methodological approaches were applied to daily data of various meteorological elements measured in the area of the Czech Republic. The tool is open and freely available. Series were processed by means of the developed ProClimDB and AnClim software ([www.climahom.eu](http://www.climahom.eu)).