



## **Extreme value analysis in daily air temperature and precipitation series in the area of South Moravia, Czech Republic since 1848**

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The long-term series of air temperature and precipitation, based on standard climatological observations 0700, 1400, 2100 hours, were investigated in the area of Southern Moravia (Czech Republic) in the period 1848-2006. These series were prepared, quality checked and homogenized by means of AnClim and ProClimDB software ([www.climahom.eu](http://www.climahom.eu)). Besides daily values itself, monthly averages as well as monthly and annual number of days above given threshold (0°C, 5°C, 10°C, 15°C for temperature, &#8805; 0.1, 1.0, 5.0, 10.0 mm for precipitation) were investigated, including maximum seasonal k-day precipitation totals (with  $k = 1, 3, 5, 10$  and 20 days). Comparison of temporal changes using trend and spectral analyses as well as spatial changes were evaluated. Following the temporal and spatial patterns found, changes in General Extreme Values distribution (GEV) over the given period were examined and compared. The analysis was carried out separately for the individual seasons (DJF, MAM, JJA and SON) and the year.