



## **Hydrometeorological extremes reconstructed from documentary evidence for the Jihlava region in the 17th–19th centuries**

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Different documentary evidence (taxation records, chronicles, insurance reports etc.) is used for reconstruction of hydrometeorological extremes (HMEs) in the Jihlava region (central part of the recent Czech Republic) in the 17th–19th centuries. The aim of the study is description of the system of tax alleviation in Moravia, presentation of utilization of early fire and hail damage insurance claims and application of the new methodological approaches for the analysis of HMEs impacts. During the period studied more than 400 HMEs were analysed for the 16 estates (past basic economic units). Late frost on 16 May 1662 on the Nove Mesto na Morave estate, which destroyed whole cereals and caused damage in the forests, is the first recorded extreme event. Downpours causing flash floods and hailstorms are the most frequently recorded natural disasters. Moreover, floods, droughts, windstorms, blizzards, late frosts and lightning strikes starting fires caused enormous damage as well. The impacts of HMEs are classified into three categories: impacts on agricultural production, material property and the socio-economic impacts. Natural disasters became the reasons of losses of human lives, property, supplies and farming equipment. HMEs caused damage to fields and meadows, depletion of livestock and triggered the secondary consequences as lack of seeds and finance, high prices, indebtedness, poverty and deterioration in field fertility. The results are discussed with respect to uncertainties associated with documentary evidences and their spatiotemporal distribution. Archival records, preserved in the Moravian Land Archives in Brno and other district archives, create a unique source of data contributing to the better understanding of extreme events and their impacts.