



Hydrometeorological extremes around the River Morava in the 18th–19th centuries derived from documentary sources of economic character

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Hydrometeorological extremes always influenced human activities, such as agriculture, forestry, water management, and caused great material damage or even loss of human lives. In the Czech Lands (recently the Czech Republic), systematic meteorological and hydrological observations started generally in the latter half of the 19th century. In order to create long-term series of hydrometeorological extremes, it is necessary to search for other sources of information for their study before 1850. Direct and indirect information about hydrometeorological extremes is included in documentary evidence, e.g. chronicles, memoirs, diaries, early visual weather observations, newspapers, economic sources etc. Documentary evidence of economic character belongs to the most important sources, especially documents related to taxation records. Damage to agricultural crops on the fields or damage to hay on meadows due to the hydrological and meteorological phenomena has been a good reason for the abatement of tax duty. Also various reports of administrators of estates to the holders could contain information about damage caused by these phenomena. The paper deals with official correspondence of the estates of Břeclav, Strážnice, Uherský Ostroh, Veselí nad Moravou, Buchlov, Velehrad and Napajedla located along the River Morava (south-eastern Czech Republic). The data, deposited in the Moravian Land Archives in Brno, covers the 18th and 19th centuries. Excerpt of archival documents gives information about the type of extremes (flood, flash flood, torrential rain, hailstorm, thunderstorm, windstorm, late frost), date of the occurrence, course and corresponding impacts. Created series of individual extremes are used for the study of their fluctuations in the context of past and present climate variability. Some most disastrous events are further analysed.