



## **Hydrometeorological extremes at the Veselí nad Moravou estate (Czech Republic) in the period 1794-1850 derived from documentary evidence of the economic character**

Kateřina Chromá

Masaryk University, Institute of Geography, Brno, Czech Republic (kchroma@sci.muni.cz)

Hydrometeorological extremes influenced always human activities (agriculture, forestry, water management) and caused losses of human lives and great material damage. Systematic meteorological and hydrological observations in the Czech Lands (recent Czech Republic) 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. Such 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. Based on the official correspondence of the estate of Veselí nad Moravou (southern Moravia), archival information about taxation from the Moravian Land Archives in Brno was excerpted. Based on it, 46 hydrometeorological extremes which occurred between the years 1794 and 1850 were selected and further analysed. Because of fields and meadows of the above estate were located along the Morava River, reports of damage due to floods were the most frequent, followed by damage due to torrential rains and hailstorms.