



Hydrometeorological extremes in Southern Moravia, Czech Republic, since AD 1701

Rudolf Brázdil (1), Kateřina Chromá (2), Lukáš Dolák (1,2), Ladislava Řezníčková (1,2), and Hubert Valášek (3)
(1) Masaryk University, Institute of Geography, Brno, Czech Republic (brazdil@sci.muni.cz), (2) Global Change Research Centre AS CR, Brno, Czech Republic, (3) Moravian Land Archives, Brno, Czech Republic

Hydrometeorological extremes (HMEs) cause often loss of human lives and material damage. For understanding of their recent and future changes the knowledge from the past is important. Documentary evidence represents an important source of data about them spanning over several past centuries. The contribution analyses temporal and spatial variability of HMEs (mainly flood, flash flood, thunderstorm, hailstorm, windstorm, torrential rain) in Southern Moravia, the Czech Republic, from AD 1701. Corresponding information related to HMEs and their impacts is taken prevalingly from archival records such as taxation documents (reduction of taxes in case of any damage caused by HMEs), weather records in family archives and chronicles, but also in newspapers and systematic meteorological and hydrological observations. Created database allows study long-term changes in frequency, seasonality, magnitude, synoptic reasons and human impacts of HMEs. Examples of several the most disastrous HMEs are presented. Results obtained are discussed with respect to uncertainties in existing documentary data and systematic observations.