



## **Droughts in the Czech Lands: Past, Present and Future**

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The presentation highlights main results of the InterDrought project (2013–2015), which includes several Czech universities and research institutes, and also shows overview of multidisciplinary scientific monograph on drought. The basic data sources consisting of instrumental, documentary, tree-ring and satellite data are presented. Selected drought indices (SPI, SPEI, Z-index and PDSI) calculated from homogenised Czech temperature and precipitation series are used to describe spatial and temporal variability of droughts in the Czech Lands for the 1804–2010 period including selection of drought extreme episodes and their detail description with respect to meteorological and synoptic patterns and impacts as well. Analysis of droughts prior 1804 is based on documentary data and oak tree-ring widths used for compilation of 500-year Czech drought chronology. The occurrence of extreme droughts is further analysed with respect to sea-level pressure patterns in the Atlantic-European area, climate forcings and changes in land-use. Examples of agricultural and hydrological droughts are mentioned. High resolution soil moisture models are used to estimate drought trends in last five decades as well as estimate future development of droughts in the Czech Republic. Overview represented by this paper will be complemented by several individual detail studies of other InterDrought Team members.