



Documentary evidence as a source of data for temperature and precipitation reconstructions in the past millennium

J. Macková, R. Brázdil, P. Dobrovolný, M. Halíčková

Masaryk University, Brno, Czech Republic (mackova@geogr.muni.cz / Fax: +420-549491490)

Documentary evidence is used as one type of proxy data extending knowledge about climate in the pre-instrumental period in Europe where exists a long cultural tradition of keeping written documents. Documentary data are one type of evidence used in the EU project MILLENNIUM for temperature reconstruction. On the example of the Czech Republic, available data sources and their evaluation are presented. The data sources include written narrative sources (annals, chronicles), visual daily weather records, personal correspondence, economic records, special prints, early journalism, early scientific papers, early instrumental records etc. Advantages and disadvantages of documentary evidence with respect to temperature and precipitation reconstructions are discussed. Database creation and dealing with these data is described. Density of weather records is increasing from the past to the present, changing from information about weather and climatic extremes to description of usual daily weather. These data are used for deriving temperature and precipitation indices. Utilisation of visual daily weather records for deriving indices and their quantification is documented. Future research activities in the Czech Republic are also presented.