Geophysical Research Abstracts, Vol. 7, 08960, 2005
SRef-ID: 1607-7962/gra/EGU05-A-08960

Cold and Warm Periods in Hurbanovo in 1951-2003

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In this contribution the temperature time series of Hurbanovo Observatory are analyzed. Hurbanovo (115 m a.s.l.) is representative station for the Danubian lowland in Slovakia and it ranks among the best meteorological stations in the Central European region with sufficiently long and good-quality observations (1871-2004). Analogue method for study of climate in this locality is presented. Daily data series from 1951 to 2003 for creation of selected cold and warm periods has been utilized. Cold and warm winter or summer seasons are characterized by air temperature as well as by precipitation, synoptic situations, humidity and some other variables observed at Hurbanovo or accepted for Slovakia (synoptic classification). Past warm periods can be considered as some analogue of future climate under strengthened greenhouse effect conditions. In the future we plan to study cold and warm periods existing in coupled general circulation models output results for Central European region. Analogue method and some other methods of regional climate change scenarios design are more in details presented in Lapin and Melo 2004, Lapin 2004, Melo 2003.

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