Geophysical Research Abstracts, Vol. 7, 07713, 2005

SRef-ID: 1607-7962/gra/EGU05-A-07713 © European Geosciences Union 2005



Estimation of the climate change of evaporation in some regions in Bulgaria

A. Tzenkova, J. Ivancheva, E. Koleva

National Institute of Meteorology and Hydrology – Bulgarian Academy of Sciences, Sofia, Bulgaria (ani.tzenkova@meteo.bg , plamen.videnov@meteo.bg , / Fax: +3592 988 44 94)

Water is essential for life and water problems are strictly related to the present and future living conditions in the world. One of the principal aspects of present and future water problems is the rational utilization of the existing surface and underground resources, in order to satisfy the demand that is strictly connected to all the intrinsic aspects of human living and civilization.

Climate changes are directly related to water resources, which are of high socioeconomic and environmental significance. The aim of presented work is to analyze the trends in the evapotranspiration time series. The data from four meteorological stations in Danube hilly plain are used. The Spearman and Man-Kendall tests are applied. In the paper also are given the expected values of actual evapotranspiration for the years 2025, 2050 and 2100, obtained on the basis of the results from HaDCM3 and ECHAM4 climate change scenarios.