New Climate Atlas of the Czech Republic – Climate Classifications

V. Kveton, **M. Zak**

Dept. of Climatology, Czech Hydrometeorological Institute, Prague, Czech Republic
(michal.zak@chmi.cz)

The new Climate Atlas of the Czech Republic (based on period 1961-2000), contains some types of climate classifications. Three classifications were used: Köppens classification, Quitts classification and the classification used in previous Climate Atlas of the Czech Republic, 1958. Internationally, Köppens classification is one of the most frequently used and generally accepted global climate classifications and of late, there have been many enquiries from abroad about how to rank the climate of various parts of the Czech Republic according to it. The other two classifications are the most frequently used ones in the Czech Republic.

Climate classification maps were created directly in digital form. Maps were based on digitally created maps of individual climatic elements (temperature, precipitation, wind, cloudiness and sunshine). Since the climatic types are categorical data, the grid forms of the input maps of single elements were transferred into a database environment. Then full classifications for each pixel of the grid of the terrain of the Czech Republic were made. The smoothing of the borders of the climatic types was made by means of a special algorithm. The resulted database forms of grid of all classification maps were then imported into the GIS environment for final adjustment (shapefile creating, colouring, etc.).

Some examples of maps are given.

The Atlas contains parallel Czech and English text.