



Mueller's maps of the Czech lands

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Old maps are part of a cartographic and art history of any nation. They are living history and they have been attracting attention of people for centuries. A study, processing, research and publication of old maps on the Internet make them accessible to the academic and to the general public. The research team has been focused on two Mueller's maps of the Czech lands, the map of Moravia (1712) and the map of Bohemia (1723).

The map of Bohemia consists of 25 map sheets. Every scanned map section was merged together with others into the one raster image. The problem of quartering of each map section was solved through the projective transformation of every quarter. The network of points was established in order to define precisely the corners of each quarter of the map section. The transformations resulted in the one big raster image displaying the entire Mueller's map of Bohemia.

Cartometric analysis determined map projection as a normal aspect of the cylindrical projection equidistant in meridian with two standard parallels. The standard parallel 50°04' was identified through the measuring of a latitude and longitude segments. Measuring of the graphic map scale resulted in the scale being 1 : 134 087.

Raster images were georeferenced by using the network of identical points, which mainly represented major towns' medieval walls. Different sets of identical points were tested. The various types of transformation were tested with respect to their rate of distortion. Affine and spline transformation were figured out as the most suitable.

An Internet visualization of the map was conducted as a part of this project. Two different methods were used: the Zoomify application for the non-georeferenced raster

and the UMN MapServer for the georeferenced one.

Publication of maps on the Internet presents these beautiful maps and it contributes to popularization of cartography and increase interest in maps. Overall conclusions of cartometric analysis are consistent with previous findings. Works on project will continue.

This research has been supported by the GA CR grant No. 205/07/0385.