



## **GPS navigation on historical and modern geological maps**

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The usage of the georeferenced map in GIS applications provides the possibility to apply the geological maps in real-time GPS-navigation. In these tasks, both historical and modern geological maps can be applied. A georeferenced raster file of the geological map can be rendered as a background image in a GPS software on a Personal Digital Assistant (PDA). The software shows the actual position provided by the GPS on this background. Thus, the information of the geological map can be interpreted directly on the field at our position. Using this procedure using modern maps, it provides interesting new application for the users. The usage of historical maps is a possible application for the mapping geologists, too. In the present work, we give an algorithm of such an application and tackle the problem of the characteristic errors of this application.