The Habsburg triangulations of the Balkan Peninsula (1853-1875) and the Habsburg and Serbian topographic maps based on them

B. Kovács (1) and G. Timár (2)

(1) Dept. of Cartography and Geoinformatics, Eötvös University of Budapest, Hungary (climbela@map.elte.hu) (2) Dept. of Geophysics and Space Science, Eötvös University of Budapest, Hungary (timar@ludens.elte.hu)

The Institute of Military Geography of the Habsburg Empire carried out some extent geodetic surveys in the Turkish part of the Balkan peninsula between 1853 and 1875. These triangulation and leveling works concerned the present territories of Bosnia-Herzegovina, Albania, Montenegro, southern Serbia and Kosovo, Bulgaria, southern Romania, Macedonia and northern Greece. The dates of the survey of the different territories are connected to the military and political history of the 19th century Balkans. The projects were connected to the International Arc Measurements (International Gradmessung) and resulted in some cartographic works. One of them was the 1:75,000 scale topographic series of the Third Survey of the Habsburg Empire and the adjacent area, first issued in the 1880s. A less known map series was issued by the Serbian military geographic survey before the WWI, which is also presented.

We present the methodology of the Austrian geodetic activities during the Balkan survey based on original documents stored in the Austrian military archive. Astronomic measurements were completed by some geodetic adjustments made in smaller blocks, resulted in point list with different prime meridians (Ferro and Paris). Based on these databases, the projection system of the Third Survey and the early Serbian topographic series are presented.